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A PARTY A DAY KEEPS THE DOLDRUMS AWAY

These were two absolutely turbulent months which, in hindsight, felt more like two weeks. And if we had had to deal with everything that happened since the last editorial deadline in merely two weeks, this page would most likely be empty. It all started out with a short trip to Reboot Develop Conference in Dubrovnik (p. 10), Croatia's idyllic tourist spot, probably known to most of you as »King's Landing«, closely followed by three days at QUO VADIS in Berlin, the Nordic Game Conference in Malmö as well as the second edition of the GermanDevDays (p. 7) in Frankfurt, which is fondly referred to as the »summer party of the German games industry« among the local games industry peeps. And since a party a day keeps the doldrums away...

There's every reason to celebrate...

... especially for the German games industry, and that's awesome! Even if this Making Games editorial is only my fourth one, it's actually really refreshing not having to write about a series of bad news for once as it was the case in nearly all of the last issues. Redundancies? They will never cease and are never a nice thing, but that's common practice in other industries, so why should it be any different in the games industry? Scandal at the German Computer Games Awards? Wouldn't it be just as strange if everything went completely smoothly? It's all the more positive that Germany has released what feels like one hit after another in the past few months. But I will leave naming these titles up to our guest columnist Timm Walter on page 6. I, personally, would like to take the opportunity to congratulate Daedalic, Mimimi Productions, Deck13 and, above all, Klonk Games. The latter one has already released the indie platformer »Shift Happens« in February, but just took the time to talk about it in more detail in this issue – which brings me to the next point!

If you fall, get up again!

The development of the co-op puzzle from Munich was anything but smooth, as you can read about from page 12 to 29. But the result is what counts in the end, and not only is it impressive, it's also a lot of fun! And even if there's always room for improvement – no matter for which game – it's usually these obstacles and setbacks which eventually allow us to grow and teach us how to do it better next time.
But enough philosophy for now! After all there's a plethora of great articles by our numerous guest authors, waiting to be read on the following pages – perfect to bridge the by now foreseeable period until gamescom and devcom.

Enjoy the latest issue!

Your team at Making Games

Dirk Gooding
Editor-in-Chief at Making Games Magazine

Nico Balletta
Managing Editor at Making Games Magazine

»It's the obstacles and setbacks that allow us to grow and teach us how to do it better next time.«

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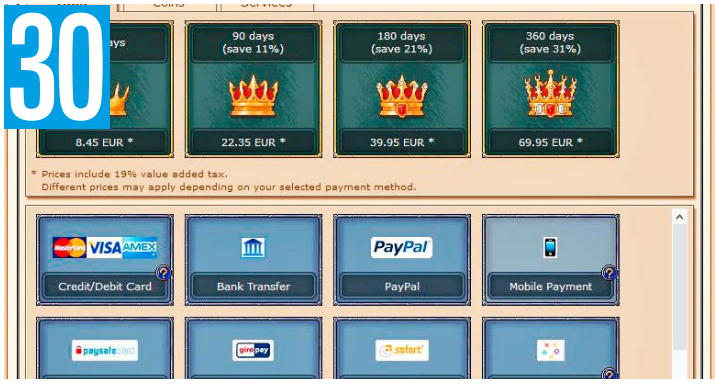

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The industry at a glance

FOCUS GAME
SPACE – THE FINAL FRONTIER

This is the story of a new hope for the German games industry.

Timm Walter
Head of Operations at GAME – the German Games Industry Association

Timm Walter is a political scientist and – as Head of Operations at GAME – responsible for all operational activities of the German Games Industry Association. Before his time in the association, he gained vast experience in politics and the media industry as well as in various associations.

Boundless creativity in boundless space: »Dreadnought«, »The Long Journey Home« and »Everspace« are not only set in space, they all are made in Germany, too.

With it's the year 2017, and as it seems German games are doing better again. On their long-term mission to tap into new target groups and push into unexpected sales markets, the crews of the »HMS Daedalic«, the »USS ROCKFISH Games« and »FGS Yager« set out not only to meet the demand in the »space game« genre, but also to create something which German developers haven't had any or much success in so far: to get into the focus of the press and gamers within a few days with as many as three games. Three games with a very similar topic – and this is their story ...

Potential on the horizon

After employing the obvious (and maybe not that elegant) »Star Trek« references, it's worth taking a closer look at these exceptional games and asking ourselves the legitimate question if this is only a short flash in the pan of the German games industry or whether we have actually discovered a new genre for ourselves, beyond adventures and simulations. Since space is limited here, this column isn't supposed to be a deeper analysis of the three mentioned games. However, we can't help but notice that with »The Long Journey Home«, »EVERSPACE« and »Dreadnought« (even if still in open beta) as many as three high-quality titles with a similar topic were released just within a few days' time, all of which caught the attention of both the press and the audience alike.

Is this maybe a sign of a deeper desire for the unknown? A gap which nobody since »X-Wing«, »Wing Commander« and »Freespace« could fill except the famous space-faring nation that is Germany (apparently, »Star Citizen« is not going to be released until 2200 after all)?

Or do we »just» have three exceptional products coming from Germany which all happen to be set in space? Surely, this question isn't easy to answer.

> »It seems as if the German games industry has found its drive again.«

But the fact is that all three games are of high quality and can easily keep up with the international competition – each in its own special way and each for its particular target group. That's awesome!

When taking a closer look at the releases of the past few weeks, we notice that not only these three prime examples from Germany caused positive feedback. »Phoning Home« is a de facto one-man project which received mainly positive reviews on Steam, while »The Surge« by Deck13, which also has a sci-fi setting like all other products mentioned, is the next big »Souls Like« blockbuster after »Lords of the Fallen«. But in recent times, there have been exceptional German products beyond this genre, too, which enjoy international attention. Within just a few days, »Lonely Mountains: Downhill« by Berlin-based indie Megagon Industries went through Steam Greenlight, Mimimi Productions' »Shadow Tactics« received international acclaim, »The Pillars of the Earth« by Daedalic seems to be not only a detailed adaption of the book, but also moves off the beaten adventure tracks, and the winner of the German Computer Games Award 2017, »Portal Knights«, is not only a hit in Germany, but also and especially in Asia.

Back to old powers

It almost seems as if the German games industry has found its drive again – a drive that already once existed when games like »Battle Isle« and »Turrican« were popular outside Germany, too. Maybe this run will last – it's to be hoped for since the games market provides boundless space for development after all, and especially in Germany there seems to be no limit to creativity...

GermanDevDays
Frankfurt_23&24_Mai_2017

GERMAN DEV DAYS 2017

GDD kicked off their second round in Frankfurt - and started and ended with a bang.

From May 24 to 25, 2016 the first GermanDevDays were hosted in Frankfurt/Main – a small, but very family-like conference – completely free of charge. A gift to the industry, or as organizer Stefan Marcinek put it in his laudation during the last German Developer Awards: »Those who are successful bear a responsibility to give something back.« Almost on the day one year later – from May 23 to 24 – it was time to kick off round two. While it wasn't completely free for everybody any more, except for students of education in gaming as well as for indies which had the chance again to present their titles in the expo area, it was still very affordable – especially considering the massive program compared to the previous event. And the first icing on the cake was served by the organizers right at the very beginning.

The GermanDevDays beneficiary foundation

Assemble Entertainment have initiated a foundation to take care of the funding of talent in the German games industry in the form of scholarships, mentor benefits and financial awards. The financial foundation consists of a donation by Stefan Marcinek in the amount of 15,000 euros as well as another 5,000 euros donated by CipSoft, BlueByte, Tivola, Morphicon, GamesQuality and Bluebox Interactive. The beneficiary foundation is managed by Assemble Entertainment GmbH; however, it is completely separated from the organization of the GermanDevDays for which Marcinek even considers a change of location. An advisory board consisting of five members, including a student representative, decides on the use of the funds – up to twice a year. The advisory board is appointed for two years, the student representative for one year. The members of the advisory board are Prof. Dr. Linda Breitlauch (Trier University of Applied Sciences), Felix Falk (BIU), Wolfgang Reichardt (gentlymad), Stefan Marcinek (Assemble Entertainment) as well as student representative Justin Zwack (Mittweida University of Applied Sciences).

The summer party of the German games industry

For two days, newcomers and industry veterans alike had the opportunity to mingle. It was nice to see that all panels and talks attracted a lot of visitors, even or especially the opening talks on day two by Svenia Bhatty of »Gaming-Aid e. V.« as well as Benjamin Glatzel and Sarah Wrensch from Deck13, who provided a look behind the scenes of »The Surge« – and all that after the fantastic BBQ hosted by metricminds. A lot of good reasons to save the date for the GermanDevDays 2018.

Both conference days ended with interesting panels, even if some of them had slightly strange titles.
(Photocredits: Christoph Engels)

Just like the previous year, the second GDD attracted a lot of visitors who enjoyed the exuberant atmosphere.
(Photocredits: Christoph Engels)

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Innovation und Evolution in the German Games Industry

Date and fees

- **Duration**: 60 minutes
- **Tuesday, June 27** at 5pm
- **Fee**: 19.00 EUR
  (free for members of the BIU network)

Christopher Kassulke
CEO and Founder of HandyGames

The games market is changing more and more rapidly. A lot of companies can't keep up or are oblivious to what's happening around them. Platforms, business models and market leaders are subject to constant change. Those who don't move with the times, will be removed with the times. As a game developer you need to be flexible and agile, but how can you tell whether a game is going to be a one-day wonder or the next big thing? Is that possible at all? Nobody wants to miss the next trend since this usually means embarking on an uncertain future.

Become a Speaker!

You're an active member of the games industry and there's a topic you know all about and you would like to present in a webinar? Wonderful – BIU is always looking for speakers.

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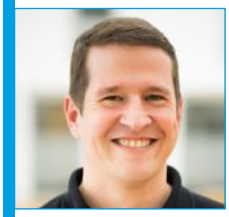


THREE QUESTIONS FOR...

BENJAMIN ZUCKERER

As Senior Product Manager, Head of the Innovation Team and lately as Assistant Manager, Benjamin Zuckerer has been a part of Regensburg-based developer CipSoft for ten years now.

CIPSOFT
INFINITE ENTERTAINMENT

What was your first thought when you were promoted to become part of the senior management at CipSoft?
My first thought was: »Wow, that's a lot of responsibility!« I've had a lot of jobs at CipSoft, like Senior Product Manager and Head of the Innovation Team. Also, in the last few years, I had already been working very closely with the senior management and was involved in all important decisions. The latest role is a big challenge, but obviously a very exciting one, too. We have set ourselves ambitious goals and want to continue CipSoft's unique success story.

Are you and Stephan Vogler (note: Company Founder and Chairman) splitting up the areas of responsibility of the senior management between each other?
The senior management always works together very closely. We complement each other very well in terms of our strengths and weaknesses and split up important strategic projects between each other. In the last few years, we created a central system of indicators for the company, allowing us to make better decisions based on the data we collect. In my time as product manager, I was able to gain a lot of experience in analyzing and interpreting these kinds of data. Hence, this topic has become one of my core areas.

Which challenges do you expect for CipSoft?
With »Tibia«, we published one of the first MMORPGs in 1997, and we've been operating the game for more than 20 years now. With »TibiaME«, we developed the first MMORPG for mobile phones in 2003 – on monochrome displays. We're working on several very exciting projects and want to use them as the groundwork for the next 20 years. I see the biggest difficulties and thus challenges in the highly competitive market. Hundreds of awesome games are released every single day, which vie for the players' and the press' attention. Standing out from this crowd and making a lasting impression is incredibly hard.

Stephan Vogler (left) and Benjamin Zuckerer (right) form CipSoft's new senior management

Event calendar

www.makinggames.biz

Online event calendar with search function and event infos

JULY 2017

QUO VADIS 2017
Location silent green Kulturquartier, Berlin
Date 6 July
Topic Reception
Fee ---
Website www.medianet-bb.de/de/event

Develop Conference
Location Brighton
Date 11 to 13 July
Topic Conference
Fee £160 to £2,299
Website www.developconference.com

Comic Con International San Diego 2017
Location San Diego
Date 20 to 23 July
Topic Convention
Fee tba
Website www.comic-con.org

AUGUST 2017

SIGGRAPH Conference
Location LA Convention Center, Los Angeles
Date 30 July to 3 August
Topic Conference / Exposition
Fee 50 to 1,845 Dollar
Website s2017.siggraph.org/

Casual Connect USA
Location Seattle
Date 1 to 3 August
Topic Conference / Awards
Fee 550 to 750 Dollar
Website usa.casualconnect.org

RESPAWN - Gathering of Game Developers
Location Cologne Fair
Date 20 to 21 August
Topic Conference
Fee 69 to 169 Euro
Website www.respawngathering.com

devcom (Developer Conference / Summits / Keynotes)
Location Cologne Fair
Date 20 to 24 August
Topic Conference / Summits
Fee 199 to 1,199 Euro
Website devcom.global

gamescom
Location Cologne Fair
Date 22 to 26 August
Topic Conference / Exposition
Fee 7 (Consumer) to 83 (Business) Euros
Website www.gamescom-cologne.com

Berlin Reception @ gamescom
Location Cologne Fair
Date 22 August
Topic Reception
Website www.biu-online.de/events/gamesnet-berlin-reception-gamescom/

BerlinBalticNordic.net @ gamescom
Location Cologne Fair
Date 23 August
Topic Reception
Website https://www.berlinbalticnordic.net/en/event/

CONQUERING KING'S LANDING

REBOOT DEVELOP 2017

From April 19 to 21, Croatia's idyllic coastal town of Dubrovnik wasn't the setting of »Game of Thrones« or »Star Wars« for once, but the perfect location for games, excellent food, great wine and awesome people.

Lunch with a veteran: After his keynote, Goichi »Suda51« Suda mingled with the audience.

On the morning of April 19, a truly unparalleled conference in picturesque Dubrovnik kicked off. For three days, the idyllic Croatian coastal town, more precisely the Sheraton Resort Hotel, was the venue for a meeting of indies and veterans of the games industry. Dubrovnik's old town, which is known especially to connoisseurs of the »Game of Thrones« series and soon the blockbuster »Star Wars: Episode VIII – The Last Jedi« coming to theaters in late 2017, offered the approx. 1,100 participants not only enjoyable pastime beyond the conference; the town, or should we say »The King's Landing« – was also the motto of the now fourth edition of Reboot Develop Conference.

A goosebump opening

»You never get a second chance to make a first impression« – not only was this the title of one of the first interesting lectures by Ralph Fulton (Co-Founder and Creative Director at Playground Games); it also perfectly described the first six minutes of the conference. An orchestra which was hired just for the occasion welcomed the substantial number of participants who had shown up at this early hour with two tracks of the HBO series, followed by the official welcoming address by the Co-Founder and Managing Director of Reboot Develop Conference, Damir Durovic, as well as the first keynote by Alen Ladavac, Co-Founder and CTO of Croteam. After the following coffee and snack break (the first one of many) the audience spread out across the conference premises which weren't limited to the main part of the Sheraton, but included the pool area as well.

The perfect mix

The biggest difference to most other conferences was probably the general flair. Not only did the city of Dubrovnik and the Sheraton contribute to a very specific holiday atmosphere which almost upstaged the actual event at times. Also, the arrangement of the six tracks and the B2B exhibitor section as well as the indie area which was intentionally put in the center – the entrance

area of the hotel – was well thought-out. To get from A to B, newcomers and industry veterans had to cross paths more or less inevitably – and due to the relaxed atmosphere usually struck up a conversation which could then be deepened either during lunch on the porch, a coffee in the bar integrated in the exhibitor section or at one of the many »after work« parties. And although it sometimes got a little chilly in the evenings, it didn't harm the good vibe – the off-peak season has its disadvantages, too, after all.

High-profile speakers

In terms of the list of speakers, the organizers once again didn't hold back: veterans like Chris Taylor, Cliff Bleszinksi, Matthew Steinke, Kiki Wolfkill, Rami Ismail, Tom Putzki, Patrice Desilets, Tim Cain or even Goichi Suda, also known as »Suda51« or Robin Finck, guitarist of the band »Nine Inch Nails«, enriched the conference with their lectures and otherwise mingled with the audience. Finally, this year's conference culminated in the »Reboot Develop 2017 Indie Awards« which had been particularly anticipated by the present and participating indies. The unofficially possibly most awaited feature though was the soccer tournament of the games industry which several of the teams had been training for for months. It's always good to set priorities!

Next: Reboot Develop 2018

Those who didn't have the chance yet to visit Dubrovnik's Reboot Develop Conference but still plan on doing so, should better save the date of April 19 to 21, 2018. But, that much I can say, the early-bird offer already ended on May 5.

Nico Balletta

Interview with Damir Durovic

»Our recipe is: great food and wine, amazing speakers and all of that in a beautiful location. I think that conferences or events in general are some sort of reflection of the people who are doing them, in our or my case as well. And I think people love it and it's going to stay like that.«

Talking to Damir Durovic

We had the chance to sit down for a talk with Damir Durovic, the Co-Founder and Managing Director of Reboot Develop Conference: We talked about the history of the event, the progress and highlights of this year's edition, about feature and speaker plans for the future and, of course, the much-anticipated soccer tournament.

The full interview will soon be available on www.makinggames.biz.

In addition to the soccer tournament, the indie awards and various parties, this year offered a large number of side events again, which weren't all arranged by the Reboot organizers, but as usual were fully supported.

WELCOME TO SWEDEN
NORDIC GAME CONFERENCE

Nordic Game had a lot to celebrate this year, as the annual conference broke more than a few records.

Jacob Riis
is Program Director and CCO at Nordic Game Resources.

»You should come [to Nordic Game Conference] with an open mind, be friendly and ready to connect with people. If you are curious, you will get into a lot of topics and discussions with people that you wouldn't normally talk to at other developer conferences.«

The Nordic Game Conference is held annually in Malmö, Sweden. This year, the 2017 Knowledge, Emotion and Business edition of Nordic Game will took place from 17-19 May at Slagthuset, a beautiful venue near Malmö's city centre. We had a chance to talk to Nordic Game's program director Jacob Riis about dream jobs, his advice for his younger self and being the drummer of a really bad rock band.

Hello Jacob, how long are you working for the Nordic Game Conference?
I started off as a media partner and joined the team in 2006. At first, I was responsible for communications. After that, I moved up the ranks, got rid of my competition and started working on the programme itself ... oh wait, that's not entirely true (laughs). For me, it was really interesting to start creating the programme and getting more and more involved in the whole process of planning and executing the conference.

That's quite a long time! If you could send your younger self a message back through time to when you started, what would you tell him?
Haha, this interview is going in the right direction! But seriously, this IS my dream job. I could probably never work for a game company after hearing how hard it is – with crunch times and what have you. The Nordic Game Conference is the highlight of my life every year – not only because we put so much work into it, but also because of the positive feedback we get from the developers. Standing on the big stage in front of a thousand people, watching them being happy and seeing them connecting with each other is amazing.

It's probably similar to beeing in a band, standing in front of a crowd and playing a good show.
Absolutely. I was a drummer for twenty years of my life, and I totally get what you are saying. But there are also similarities with a game like »FIFA«: You know you have to do a sequel every year, and you definitely want to do it better than the last one, but you cannot really tear it apart and create something completely different. So it's a fine balance between fine tuning all the existing elements, introducing new stuff and get rid of old stuff that didn't work. And to get back yo your original question – I would tell my younger self: Do it! Don't think about it! It's a dream job!

When we talk to developers, we often laugh about the fact that most of our parents don't

understand what we are doing. What do you tell your parents?
My parents are quite happy nowadays because they always thought I was going to be the drummer of a really bad rock band. I tried to explain to them what I am doing for a living, but as you already said they don't really understand it. I think they're happy as long as I´m not trying to restart my career as a drummer. My kids, on the other hand, think that I sit on my ass and play games all day. At least that's what they tell their friends at school (laughs).

What is your advice for someone who has never been to the Nordic Game Conference? What are the dos and don'ts for the first visit?
You should come with an open mind, be friendly and ready to connect with people. If you are curious, you will get into a lot of topics and discussions with people that you wouldn't normally talk to at other developer conferences. Also, don't get too drunk on the first day! Of course, that doesn't count for Finnish people, who are not very good at being social without their vodka (laughs).

Last year, you had Hideo Kojima as a speaker. Is there anyone else that you would really like to have as a speaker at conference?
Yes, there are plenty! Obviously big icons like Shigeru Miyamoto, but if I had to pick one, it would be Dan Houser. I would love to hear his thoughts about creating new genres and ask him everything about »Grand Theft Auto«. Besides that, there is a most wanted list in my head with all the usual suspects that haven't been at Nordic yet and will hopefully come to Sweden in the next years.

What is it that makes Nordic Games Conference so special?
I think it's the level of intimacy. This region is filled with talented people working on really successful products and games, and here they all come together. And a lot of them think of Nordic as their home turf – like an annual get-together. It's as much about business talks as it is about meeting friends and sitting together and chat. We were also working very hard to make the Nordic Game Conference even more interesting from a business point of view as it was before. We are doing this for a very long time now, but we still learn from our mistakes and listen to our audience. Nordic Game feels like a family reunion with a lot of new family members each year.

So what's your plan for the next 14 years?
Do you have an hour left (laughs)? I hope that we will expand in all directions. And not only us, but also the nordic game industry. If you want me to mention a specific thing I would say the »Nordic Game Discovery Contest« that we have introduced this year. I have really high hopes to develop this into something that could be a fresh and new take on bringing game developers closer to their audience and helping developers to get recognised. But to make a long story short: I hope that the Nordic Game Discovery Contest will take off. This year is the premiere season, but I hope it will grow over the next ten years into something like the Eurovision Game Development Contest – only with good taste (laughs)!

Interview: Dirk Gooding

Breaking All Records

The 14th annual edition of Nordic Game Conference was s complete success: From 17 to 19 May more than **2,000 attendees** participated in numerous amazing talks and panels held by more than **150 speakers**, including Anita Sarkeesian, Brie Code, Ralph Fulton, Ste Curran, Fumito Ueda and David Polfeldt and many others. Alltogether, an astounding **2,790 meetings** were held with the help of MeetToMatch business matchmaking.

On Thursday more than **900 seated guests** were served at the annual gala dinner, following the 2017 Nordic Game Awards with Playdead's »INSIDE« dominating by winning **in four different categories** and more than 1,000 guests celebrating at the Nordic Party at Slagthuset.

Friday was »Discovery Day«, which was created in cooperation with Copenhagen Game Collective to spotlight new talents. The »Discovery Showcase« displayed 40 of the most creative new games. Friday's highlight, for sure, were the »Nordic Game Discovery Contest« finals, at the end of which Finnish »Ocmo« took the prize as this season's Discovery Contest »Game of the Year«.

SHIFT HAPPENS

»Another indie platformer!«

Munich-based Klonk Games can tell a story or two about setbacks – and about the power of endurance which they proved to have a great deal of during the development of their co-op puzzle »Shift Happens«.

"Nice game! But why make it Early Access? Ideally, you program a game like this within a day or a weekend. And then you're charging 14 euros for a version that's not even finished? I'd say that's capitalism at its best..."

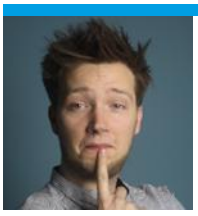
YouTube comment

Comments like the one above hurt everyone who has invested passion and time in something. »Shift Happens« is a project of the heart and the reason we founded Klonk Games in the first place. Shift Happens accompanied us for a long time, and since February 2017 it's finally available on PC, PlayStation 4 and Xbox One. Klonk have grown with this title as a studio and can look back on an interesting journey. Klonk was already formed during our time together as game design students at the Mediadesign Hochschule in Munich. In 2010, all members of the current team started studying game design at said location. What's interesting is that one of the first group projects sort of kicked off the first project – even if it took lots and lots of detours. Back then, the concept was already to force two people to cooperate. As a student team, our previous project »Mercury Shift« had already been nominated for the Newcomer Award at the German Computer Game Awards 2011.

From the university to our own company

The decision to take the project of the spiritual sequel Shift Happens – which was still called »Mercury Shift 3D« back then – to start a company correlated with the funding approval by the FFF Bayern which is responsible for film funding in Bavaria. With only little funds to develop the prototype, an office at the college and some crazy ideas in our heads, we finally founded the business association Klonk UG.

The direct transition from university to a company wasn't hard, probably (or particularly) because after our graduation, we just switched offices within the university, so not much changed in our daily routines.
At any time, the goal was to complete Shift Happens and to take this project to build



Robin Kocaurek
Associate and Co-Founder of Klonk

Robin started his career in the games industry as an artist and has eventually turned to PR and Business Development. He also likes to spend time on Twitter and create podcasts.
@koffeinvampir

Co-op puzzles for all ages: Plom and Bismo, the two heroes in »Shift Happens«, are also very well received by the very young audience.

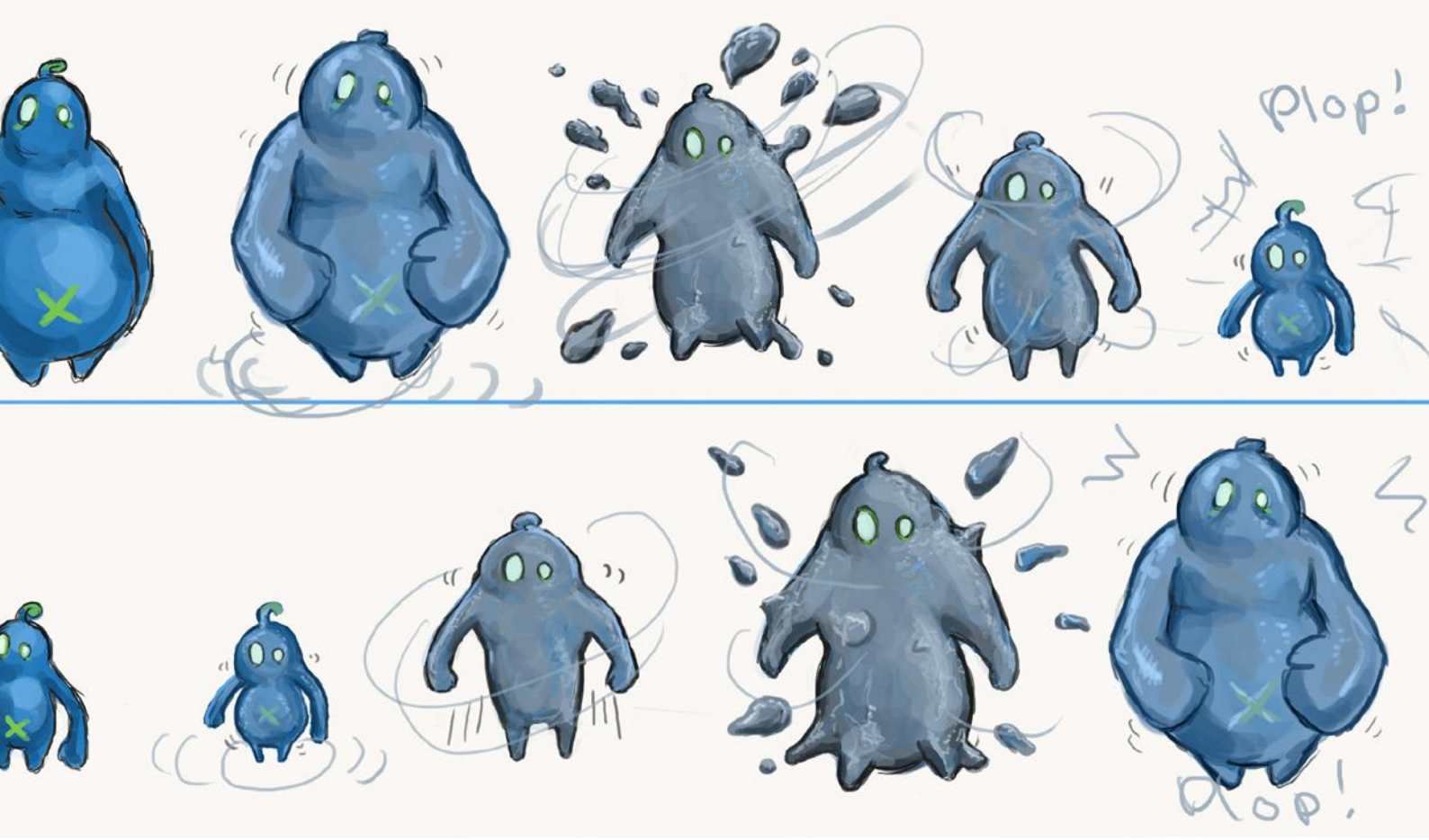
the foundation for our studio. During an initial calculation, we were pretty sure to find a publisher within the first six months and to complete the game within another year thanks to the potential funding by the publisher. It wasn't an entirely unrealistic idea, unfortunately it just didn't turn out that way in the following years.
Before we founded Klonk, we had already stepped a bit into the world of contract work. In cooperation with Deutsches Museum in Munich (the world's largest museum of science and technology), we had the opportunity to develop an app for an exhibition, which added a little to our funds.
As indicated, our plan for Shift Happens to be massively funded by a publisher didn't quite turn out the way we had pictured it. The following three years, we were busy with the development of the game on the one hand, and with the struggle to finance our company on the other. The biggest part of Klonk's funding is based on our own achievements through contract work and therefore on the personal commitment by the employees as well as their giving up on a pretentious way of living. In addition, we had the FFF Bayern funds for the prototype development and production, support by a private investor and a great deal of luck which saved us from something worse. Finally, Deck13 helped us with marketing and QA, so you could say that we kind of did find a publisher in the end.
One of the aspects we found most nerve-wrecking was definitely how long the project had to be pushed aside on the desks and in the heads of the team. Also, the technology we used didn't just update itself over time, and engine updates often not only resulted in unwanted, but also rather time-consuming integration processes. In brief: To update from Unity 3.5 to 5.6.1f3 in increments is »&!§%!«, to say the least.

Perseverance pays off: »Shift Happens« by Klonk Games was finally released in February 2017.

To the finish line with perseverance

The commitment of all people involved eventually enabled us and Klonk to reach maturity and thus the kind of quality for Shift Happens that we had aimed at. At the beginning, we didn't really comprehend the reactions we received from the publishers. Back then we had only little understanding for their decisions, unlike today. The project didn't look promising enough for anyone, the team was new and didn't have any seniority within the industry. Now that Shift Happens has finally been released and the feedback we get is positive, the business talks with our partners are on a completely different level, too. Klonk is still not the most experienced studio in the world, but managed to deliver a top-quality title and hence a kind of »proof of studio« which will allow us to work on further titles. Personally, I am incredibly thankful for the experience the team was able to gain, and I'm looking forward to new projects made by Klonk.

Robin Kocaurek



EVOLUTION OF CHARACTER

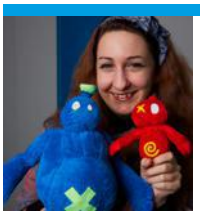
THE JOURNEY FROM 2D BLOB TO ROBOTS TO 3D BLOB

Bismo and Plom, the two protagonists from »Shift Happens«, had to endure a long journey to reach their final shape and personality – but the work paid off.

Bismo's and Plom's journey actually started before the 3D version, with the development of the flash game »Mercury Shift«. At the beginning, the two were simple mercury blobs whose charm captivated players despite their plain design. Our core mechanic, the »shift«, was already an integral part of the two characters even back then. When we sat down together to start the work on »Shift Happens«, again we had this picture of the shift as one of the crucial fundaments in our minds. We first thought that our two friends could be robots whose interchangeable mass could be displayed through a kind of energy core. We tried out a few designs, always looking for this special feeling that the 2D blobs already conveyed then. Finally, we realized that people loved the blobs, so they had to remain blobs. That very evening, the first piece of concept art for our final design was created.

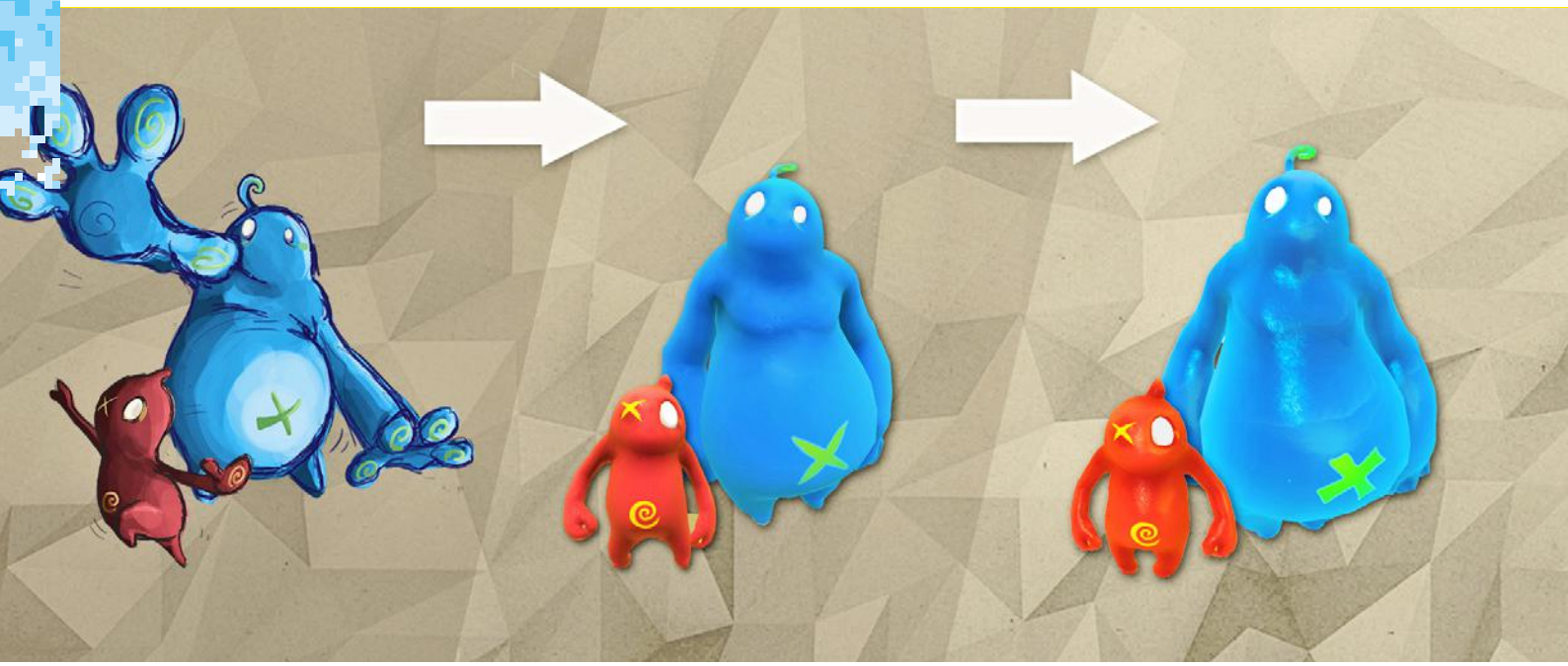
The design

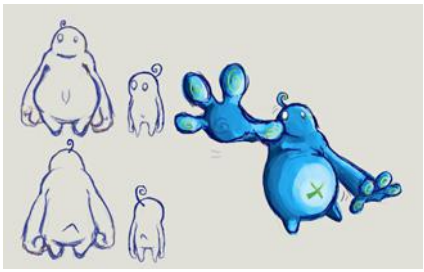
For good character design, it's important to be aware of certain basic conditions. The more guidelines you set, the easier it is to create a fitting design. The first and most important guideline for us was the already mentioned presentation of the shift, then the decision in favor of the blobs, and also the style of the game was crucial. We wanted to head into a simple, yet aesthetic-looking direction, so the same went for our characters. And we also thought of applying it to the basic principle of the game, too. Shift Happens is a game that's mainly about having fun and sharing the same experience, and of course, we wanted this basic idea to be reflected in Bismo's and Plom's looks and personalities. We wanted to create fun characters who would be

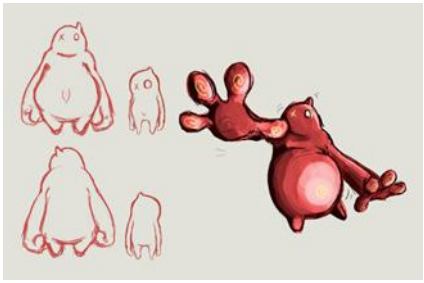


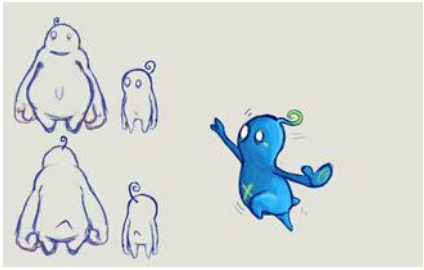
Nora Hannemann
Character Artist at Klonk Games

When something moves in »Shift Happens«, it probably has Nora's handwriting. As Character Artist and Animator, she created the characters Bismo and Plom and was also responsible for their animations. You can find more moving things and updates on her work on Twitter at @minnalya









The same and yet completely different – elaborate details help distinguish Plom from Bismo.

endearing and loveable at the same time, so that everyone would enjoy playing them to explore the world of Shift Happens.
The biggest challenge with regard to design was the fact that we had two different-looking characters whose skills were identical. Unique distinguishing features are the different mass and size, which either one of the characters can obtain. So, we had to make clear that they were two different individuals who kept their personality even when switching shapes. Nonetheless, we also wanted to bring across the characteristics of the different shapes.
In order to meet these requirements, we first based the design of Bismo and Plom on their 2D predecessors. Their ground mass was also to consist of mercury, but a lot more viscous and with clear structures. We worked with round, soft design elements to give them both a friendly appearance. Unlike the original blobs, Bismo and Plom were allowed to have colors.
We made sure to work with flat and pure colors, both to correspond to the style and to emphasize their different character. For example, they both have different luminescent symbols on their body to add some variety. They kept the same number of eyes as the original blobs, with the exception that Bismo doesn't have a single eye in the middle but a cross-shaped symbol instead of a second one. Since we kept the style rather simple, it was important to have not only a significant number of design elements, but also expressive movements of the characters.

»We wanted fun and loveable characters which everybody loves to play in a game.«

A big part of their personality had to be expressed with the help of specific gestures. Therefore, the animations play an important role to differentiate between our two protagonists.

Challenge: the shift

What turned out to be an even bigger challenge than the character development was the design and implementation of the shift itself. After all, it was the core mechanic of the game, so it had to look good and work well. At the beginning, we almost spent too much time racking our brains about it. We wanted to have a somewhat plausible and comprehendible explanation of how it was possible for our two friends to switch shapes.
We eventually fell back on the same means we already used for the 2D versions. Even though Bismo and Plom are colored red and blue, their ground mass still consists of mercury, and that's what we still wanted to allow to see despite the new designs, and the perfect foundation for this was the shift. When our characters liquefy to be able to change their shape, they return to their original liquid mercury form. This is illustrated through silvery coloring and splashes being sloshed around or pulled close.
But possibly the biggest hurdle was the implementation. We worked with blend shapes to produce a smooth transition of the two shapes. Additionally, the characters had to be scaled and swapped. The shift had to work at any time, no matter what animation phase Bismo and Plom were

A meeting of generations: Bismo and Plom from Shift Happens on the left and their clearly simpler predecessors from »Mercury Shift« on the right.

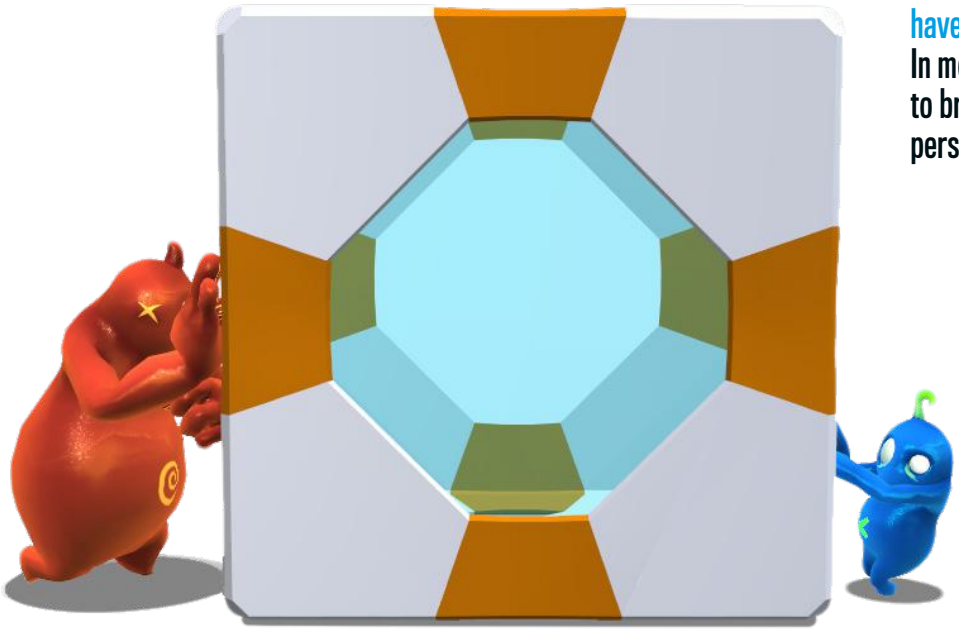
in. We had to use a lot of tricks, but in the end managed to implement the shift as planned and were happy with the result.

The result

We keep getting feedback about how loveable and funny our two protagonists are. We met the goal we had set ourselves with regard to the character design and also learned a lot on the way. While creating Bismo and Plom we realized how much design and animation can depend on each other. It proved to be quite useful to have an idea of the gestures and technique of the animations we wanted to create from the get-go. We also learned that good design doesn't necessarily have to be complex and detailed. It's usually much more important to get the emotions and personality across. Even if there were quite a few hurdles to take, at the end of the day we managed to create two loveable guys who are all in all very well received by the players.

Nora Hannemann

»Good design doesn't necessarily have to be complex and detailed. In most cases, it's more important to bring across the emotions and personality of a character.«



The core mechanics of the game played a crucial role in the design of the two characters.

MULTIPLAYER

SINGLEPLAYER

CANDY CANE

INACTIVE USE

SINGLEPLAYER VS. MULTIPLAYER

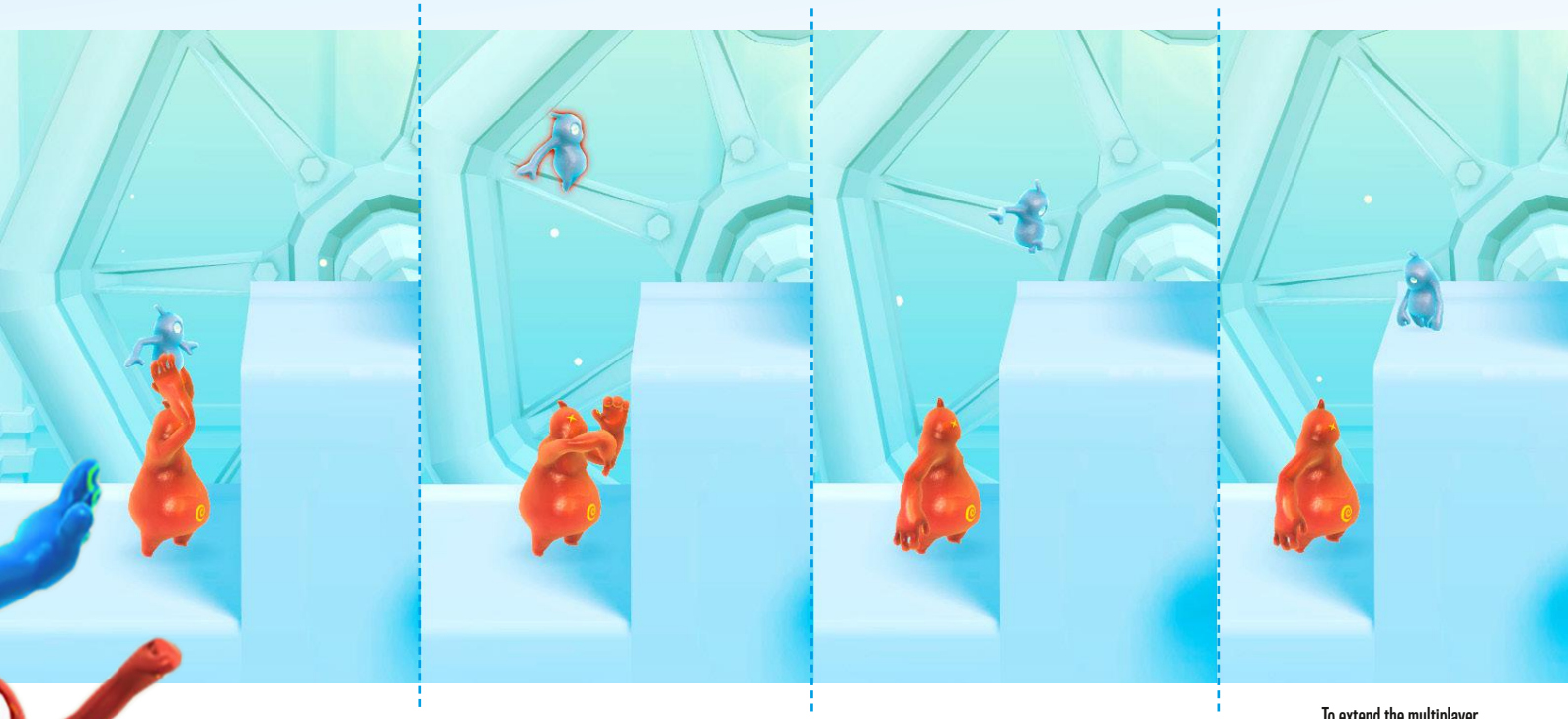
THE CORE MECHANICS OF THE SHIFT

To extend a co-op multiplayer title with singleplayer content is anything but easy.

Mathias Neukam
Level Designer at Klonk Games

Famous for his unconventional experiments, Mathias, one of our level designers, is not only responsible for creating the levels of »Shift Happens«, but also for the communication within the team. Keeping a balance of code, art and game design is all owed to him.
@MattNeuk

The fundamental idea of the predecessor of »Shift Happens« – »Mercury Shift« – was always to develop a game where two players would be challenged equally and therefore forced to work together. Together rather than side by side! When we sat down together in 2011 to discuss what we didn't like about local co-op titles of that time, it was that most of them had a rather »artificial« co-op mode. In other words: They were essentially singleplayer games that one or several other people could join to play, but weren't really needed. An experienced player (»pro«) was able to complete a level without any further support by an unexperienced player (»noob«). And most of the time, these situations were also marked by the fact that neither player had any fun since the pro was sub-challenged, while the noob felt overwhelmed. After a number of brainstorming sessions during university, the idea was born to tie two players together, so that their actions would always affect each other and hence they would have to be a lot more considerate for one another. Also, it was important for us that both players would have the same prerequisites (the same character skills), but never at the same time. The tying together wasn't implemented literally though since we didn't want to be limited by a physical instance like a rope or a hose with regard to the level design. The tie was



To extend the multiplayer title by a singleplayer mode turned out to be more difficult than expected, especially with regard to controls.

never explained concretely. It was simply a mechanic which affected two characters with the push of a button.
The »shift« was born – and it works like this: If one of the players pushes the shift button, his character will become bigger or smaller and hence lighter or heavier – depending on its current state. At the same time, the co-player's character will change as well. Since one character is always big and the other one small, both sizes can never exist at the same time. The different sizes also entail different skills. A small character is fast and agile, can jump further and get into small spaces, while a big character is slower, but also stronger and able to throw the small character or things like crates.

A seesaw for one person – singleplayer co-op?

Since we liked the core principle of Mercury Shift, but the game showed some deficiencies in its implementation, we started to develop the first prototypes for Shift Happens in Unity's 3D engine in February 2013. Little did we know back then that one day we would found a start-up and would have to earn money with our product. When the plans to start our own company became more and more concrete, one of our game design lecturers at college advised us to think about how we could distribute the game and hence to also consider creating a singleplayer mode.
Our mantra was always to keep the core of the game – i.e. two characters who are connected to each other – intact. The consequence was that two characters had to be controlled simultaneously. We tried to design a seesaw for one person without changing the basic form of the seesaw. In the end, we came up with several possible solutions for one player to control two characters:

1. One of the characters follows the other one automatically, similar to »Yoshi's Island« (the eggs hopping along behind Yoshi) or »Donkey Kong Country 2« for SNES.
2. One character can be carried on the other one's back like a backpack, similar to »Banjo Kazooie« on N64.
3. Players can switch between the controls of the characters, similar to »Lost Vikings« or »The Cave«.

> »The fundamental idea was to develop a game that would challenge two players equally.«

1. The follow mechanics

At the time of the singleplayer development we already had a number of levels which we had designed for the co-op mode. Since we were still a bit naïve back then, it was hard for us to find a system where all these levels would still work just as well with new follow mechanics. Our puzzles were often based on a system where players had to separate or carry out actions simultaneously. So, we would have had a lot of special cases in countless situations, where the automatic follow mechanic wouldn't work.
With our then limited level of expertise this seemed like too much of an effort, which is why we quickly dismissed this approach without having carried out actual tests. We also quickly reached the point where a

computer-controlled character who runs behind the active one had to meet certain requirements. Not only did we imagine a simple path-finding AI which would track the paths of the main character; we also wanted this AI to carry out actions which would be taken over by a human player in co-op mode. However, we realized quickly that this workload was too much of a burden for our code department which consisted of only two people.

2. The backpack method

The firsts tests of this method were quite promising. If a big character was close to a small one, you could carry it on your back with the push of a button. This procedure prevented characters from unnecessarily following each other through the level. However, the backpack turned out to be a problem with regard to logic and consequence since there was already a similar mechanic in Shift Happens: the carrying mechanic.
If a big character carries a small one, he's slower and ponderous and thus unable to jump far or high. In the level design, this limitation guaranteed that throwing was more important than carrying. But since the backpack was used as a means for two characters to move simultaneously, it simply couldn't limit the speed and jump height of the characters. This, however, would have meant that we had introduced a better carrying mechanic and made regular carrying superfluous.

3. Character swap

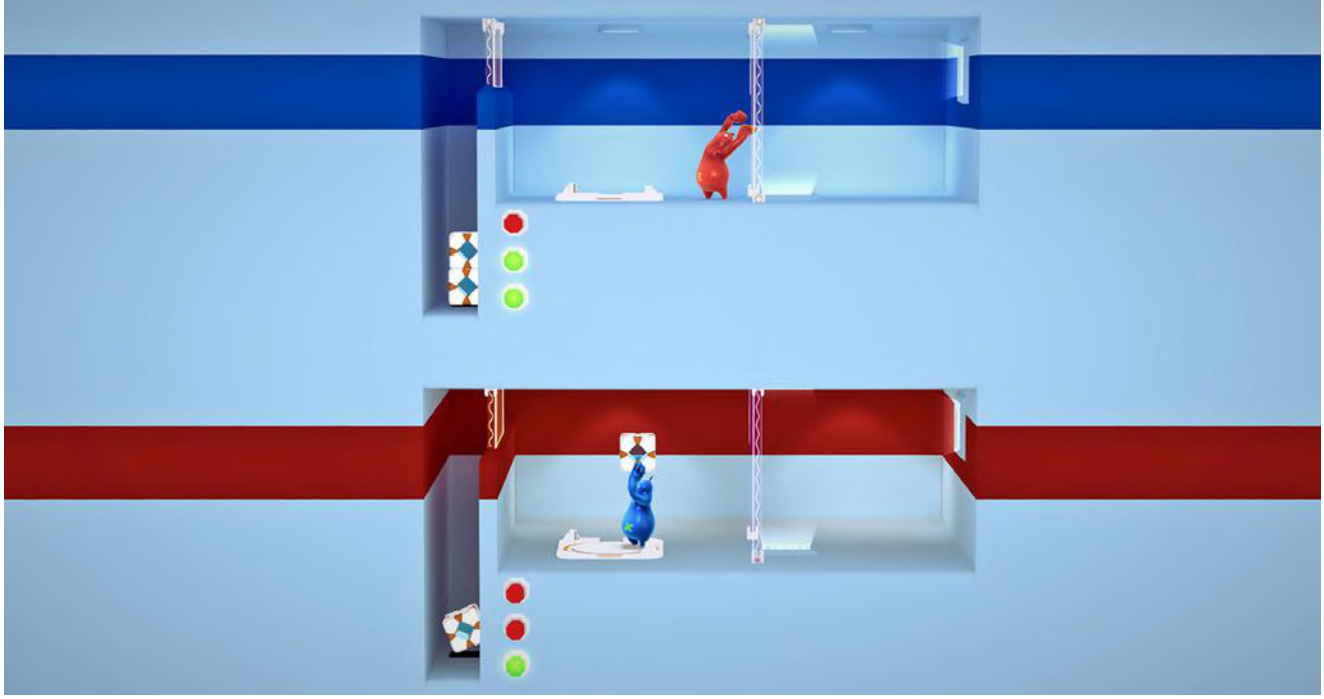
At the end of the day, we decided in favor of the »swap«. With the push of a button players can now swap between the characters, so there is always one actively controllable and an inactive character. With the swap, all our levels still worked in the same way as before, with one exception: Beginners often felt overwhelmed in singleplayer mode since shift and swap were too much alike. During our many play tests, it happened again and again that the testers would shift instead of swap and vice versa. We were wondering why this particular case occurred so often until we found out that the testers literally thought »I want to be small or big« instead of »I want to play the character on the left or on the right«. Often, the result was the same, but in a lot of other cases it played a significant role and led to disorientation and the accidental decease of the characters. Since the mechanic was introduced early in the game, the learning curve was usually too high for beginners, which led to annoyance and resignation. Many of the testers didn't want to keep playing since the game quickly became too much for them to handle.

»If we had the chance to develop Shift Happens again from scratch, we would probably do a lot of things differently.««

Swap and shift – the solution to the problem?

Spoiler alert: Instead of fighting the cause, we only really treated the symptoms.
Some of our solution approaches consisted mainly of iterating the button assignment of the controllers and separate the buttons for shift and swap as much as possible. Unfortunately, we quickly realized that this solution didn't work well for a lot of players. Therefore, we implemented a lot of our tested methods as optional settings in the game and made the button assignment customizable again, which is rather unusual for a game like this. It was also very important for us to have clearly separate feedback to differentiate between shift and swap. Through easy-to-understand animations, colors and effects (graphically and acoustically), the player was to quickly learn which of the two actions he just carried out. We gradually implemented some control aids in the singleplayer mode; for example, a character that's been thrown in the air would always slightly bend forward in order to land on a higher ledge, without having to carry out this movement himself via swap. In this case, we also offered the additional option to automatically switch to the thrown character after such a throw. Another simplification is the so-called »inactive use«, which makes it possible even for the inactive character to operate buttons and switches with the push of a button, without the player having to switch to that character. Nevertheless, the swap/shift differentiation is one of the biggest

In singleplayer mode, swap and shift mechanics demand quite a bit of training and patience from the players, which many of them become quickly frustrated with.



The singleplayer mode includes lots of levels where the focus is on solving puzzles in order to minimize frustration caused by the controls.

hurdles in the learning curve of the singleplayer mode. In addition to these aids, we also decided to create special levels for the singleplayer mode, which – compared to the co-op mode – put a higher focus on solving puzzles than on skill-focused areas.

Summary

In hindsight, it's still hard to tell whether adding a singleplayer mode was positive or negative for the overall reception of Shift Happens. In most reviews, the singleplayer mode caused rather negative feedback and thus lowered the overall rating. The question whether these ratings would have been more positive, if there hadn't been an option to play Shift Happens alone, remains unanswered though. What's clear is that the singleplayer mode in Shift Happens is a lot tougher and harder than the co-op mode. It's consequently less fun and leads to more frustration. If a player manages to make it beyond that steep rise in the learning curve and not to mix up shift and swap all the time any more, the game becomes a little more fun.

If we had the chance to develop Shift Happens again from scratch, we would probably do a lot of things differently. The decision to keep all mechanics of a co-op game in a singleplayer mode, where the players are dependent on each other and cool dynamics can only be created when actively working together, often led to unnecessary compromises; and these compromises eventually led to a rather mediocre result.

Despite a great effort to minimize our workload, we ended up building 32 extra levels for the singleplayer mode. Obviously, this raises the question whether it wouldn't have made more sense to change the core mechanics of the game in order to be able to offer a positive gaming experience in both singleplayer and multiplayer mode. Hindsight is always 20/20.

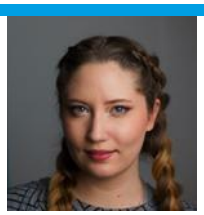
Mathias Neukam

The creation of 32 special singleplayer levels was enormously time-consuming - whether it was really worth it is hard to tell in hindsight.

THE QUEST FOR ART

SEARCHING FOR THE PERFECT LOOK

Finding the right art style for a game isn't easy. Art Director Elena Reinertz tells us which influence the existent level editor had on the choice of the final style of Shift Happens.



Elena Reinertz
Art Director at Klonk Games

Elena determinedly dropped out of her economics studies and instead started to study game design, which she successfully graduated in. Today, she is Art Director at Klonk, and as @mindlessblahs she creates and shared #polygons and #petticoats on Twitter.

Shift Happens« had developed from a student project while we were still at university. For us, this meant that we could only work on the game part-time and – due to our very different semester schedules – rarely together. When it was time to find a graphical vision, the level editor was finished for the most part, and we had also already created a number of fun puzzles. At that time, the levels visually consisted of yellow blocks of various sizes and were designed according to the gameplay. We didn't really have a lot of ideas of what the levels could represent graphically.

- The clear look of the prototype also had the effect that the controls of Shift Happens were conceptualized very precisely, since the jump points were readily apparent and it was easy to assess exact distances. From a purely artistic perspective, inclined surfaces and rounded-off edges would have been better to create natural shapes. However, at that point, the gameplay logic was such a complicated and interwoven system already that it would have been impossible to make that kind of changes. Even the slightest adaptions, like reducing the jump distance, would have caused a long chain of additional changes. Hence, the whole team was challenged to find solutions for the following issues:
- a high amount of levels
- levels not designed for modularity
- squared shapes and non-organic level layouts as well as...

Top: color script with a dramatic arc
Bottom: finished levels in »Shift Happens«

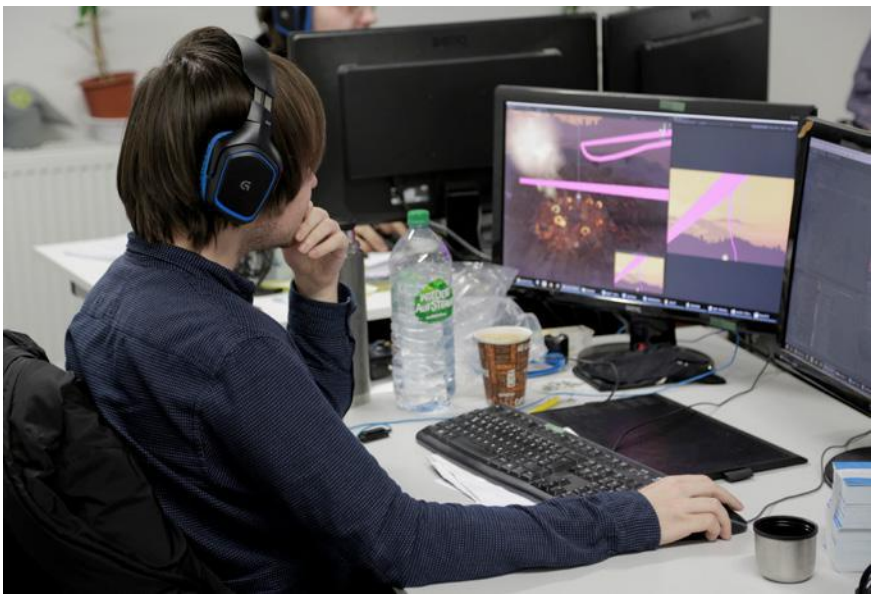
- … a still rather inexperienced team which hadn't worked on a bigger game before

We eventually decided to go for a style in a »low-poly look«, which wasn't very well known back then, since we quite liked corresponding illustrations, and thought the look had some decisive advantages. The flat colorfulness of the look was to allow us to create various assets without textures and thus without time-consuming unwrapping. The sharp-edged presentation of organic objects, too, which are applied in said style, meant for us that we were able to take over the precise controls and the already existing puzzle designs. Also, we were hoping that we could later simply assemble or scale the assets randomly since this would be concealed by the angular look. This would have made our modularity problem a lot easier. Some of these hopes became reality, while others actually caused us more problems than benefits. After we had agreed on the basic look, it was time to conceptualize the individual environments.

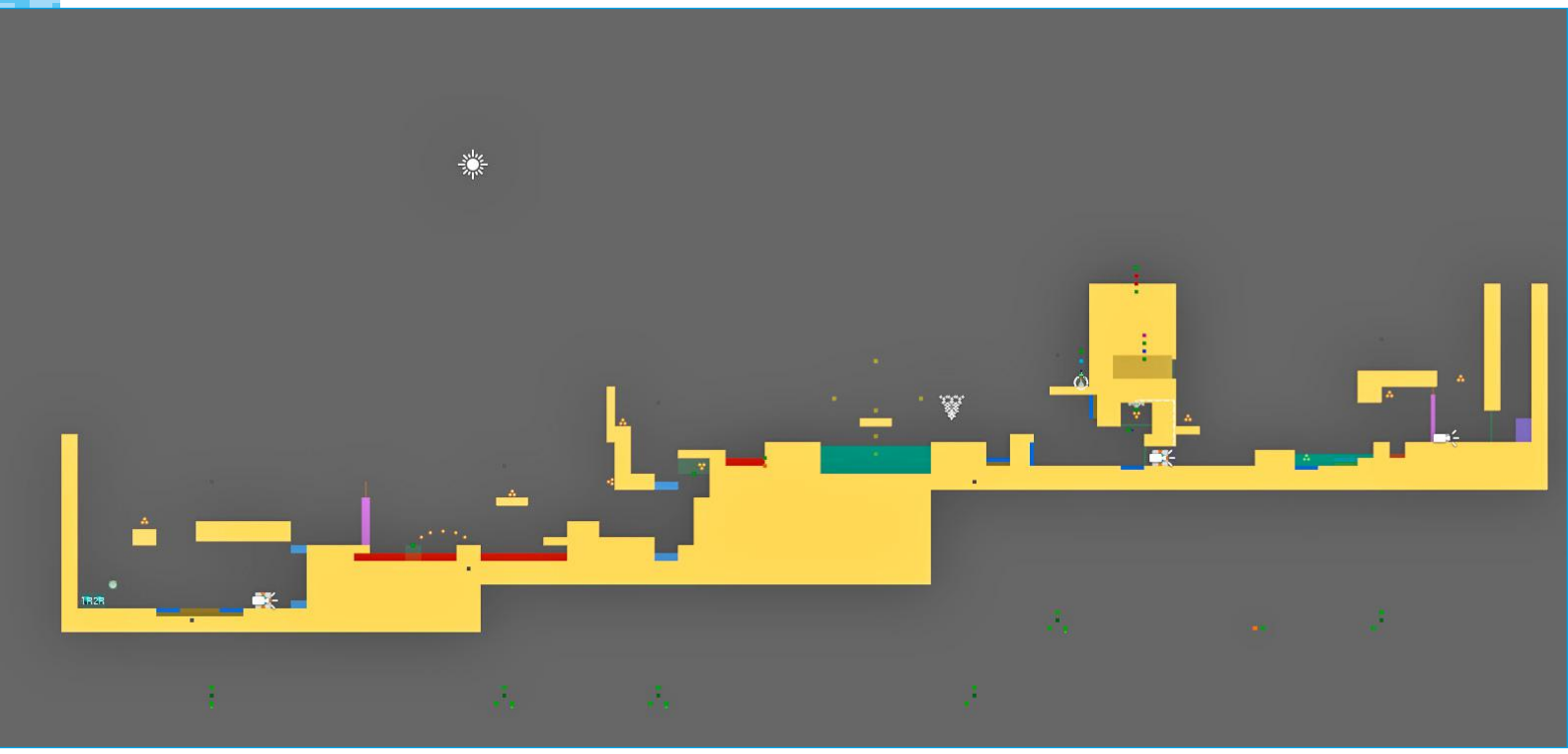
Environments – creating story without text

One thing was clear from the beginning: We didn't want a game with lots of complex cutscenes or long explanatory texts! Shift Happens was to be about having fun and solving puzzles with friends, not about a deep story, let alone a morale – except that it's always more fun to do things together. But we also knew that players like to identify with the characters and relate to their motivation, which required a certain degree of a story. So, we were faced with the question of how to tell a story mainly only through level design.

Since we didn't want to force the story upon the players, we decided to tell it mainly through shapes and colors as both are perceived subconsciously. First, we created a color script to define the predominating colors of each stage. Additionally, we made



Art direction and level design of »Shift Happens« went hand in hand in the search for the perfect look.



Top big: A series of yellow blocks to be turned into a wall.
Small: The colliders of three exemplary levels show how the dramatic arc was implemented by the level designers.

up a kind of dramatic arc to represent both the mood of the characters and the layout of the levels.

Our goal was to let the cool colors and monotonous shapes of the laboratory fade into gradually stronger, warmer colors and diversified shapes to add to the positive feeling when the player progresses in the game. In our heads, the characters were to get more and more excited as they explore the new world until a new conflict arises which we wanted to reflect through the depressing narrowness and cool colors of the grotto. In the end, the background story of the game kept changing and was more and more slimmed down. We also added a few smaller cutscenes without text or voice-overs.

Today, this dramatic arc is no longer relevant for the story as it is now, but we still used some of the elements of this idea. The color script, for example, more or less remained, and the level structure, too, is largely oriented at the dramatic arc. The levels are getting broader and more open until the canyon, gradually rising from beginning to end, so that the player has the feeling of moving towards something bigger. The grotto will then drop down again and become more and more narrow and uncomfortable until it broadens again at the end to literally represent the light at the end of the tunnel. However, unlike the original idea, we made sure that all stages convey a positive feeling, which is why the cooler colors, too, were made a bit warmer and accents were added to the warm colors. To implement the dramatic arc in the levels this way, level designers and artists worked closely together. Each level was to represent the desired feeling of narrowness or openness even without graphics.

»Shift Happens was to be about having fun and solving puzzles with friends, not about a deep story, let alone a morale.«

Low-poly – more than just reduced models

While the level designers were able to create the levels according to the dramatic arc, based on some prerequisites, the artists focused more on the low-poly look. A lot of examples we could find back then rather looked like someone had taken high-poly assets and automatically reduced them, so that the final surface geometry always had the same look – no matter whether the ground consisted of grass or stone, for example. We wanted the objects to keep the charm of their real models though, just in a plainer form. So, the special challenge was to make the objects clearly recognizable as such – without being able to use textures. How do you create a moss-covered floor with just shapes? How can trees look organic without being able to use transparencies and the possibility to display single leaves? To do this, we looked for a lot of extraordinary shapes in nature, picked out their prominent characteristics and tried to reproduce them in a simpler, yet

exaggerated way. The running surfaces of the canyon, for example, are inspired by distinct sandstone layers, while the running surfaces of the grotto are similar to snowed-in basalt pillars (see pictures above).

The decision to forego textures created another challenge for us. For one, the scaling and assembling of the assets was more visible than we had thought, which is why we ended up having to try to create the assets in a rather modular way. Also, we had to rely on high-resolution light maps to keep the clean look of the game. Usually, lower-res light and shadow information isn't that apparent since a lot can be concealed in combination with textures, or sometimes the textures can already contain this kind of information themselves. High-res light maps meant enormous render times for us, especially due to the complicated shapes and interwovenness that the low-poly look entailed. Unfortunately, we also had to update to newer versions of Unity Engine again and again – e.g. for the various console versions – where the light-mapping had changed again every single time. Not only were light maps of the older versions no longer compatible with the new version, but also the way they were calculated had changed. Whenever we recreated light maps of a level from scratch in a current version, it never looked like before. This meant not only long render times with each upgrade once again, but also several days or weeks of work to find the perfect new settings. From the first prototype of the game we created during university in Unity 4.2, we kept updating it up to Unity 5.4 until the final release. We obviously hadn't considered this amount of time in our original schedule, which definitely pushed back the completion of the game.

»We wanted objects to keep the charm of their real models, just in a plainer form.«

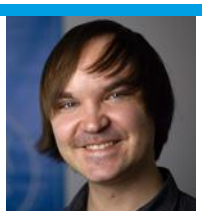
Despite these obstacles, our inexperience and one or the other decision we wouldn't make again today, we finally managed to complete the look of the game the way we had imagined it to be.

Elena Reinertz

Graphics as a storyteller: The story of »Shift Happens« isn't conveyed through text, but rather through colors and shapes of the individual levels. The focus is also on having fun solving puzzles together.

LOOK DEVELOPMENT IN UNITY

To create the right atmosphere, it takes proper lighting and shadows – for characters just as well as for backgrounds.



Simon Kratz
Technical Art Director
at Klonk Games

At Klonk, Simon is responsible for everything that consists of polygons in one way or the other and needs to be visible for the players. He started his education to become an Artist and then gradually took responsibility as the Technical Art Director. @Klonkimon

A big part of the look of »Shift Happens« is owed to our custom shaders which helped us create the game in a colorful way even without textures. When we started developing Shift Happens, there was no such thing as PBR Shading in Unity 4 yet, and even after several iterations, it wasn't possible for us to create the look we wanted to achieve, using ordinary Unity shaders. Without textures though, we were very much dependent on the shaders to define the look.

Hence, we decided not to use Unity shaders any more, and instead build shaders ourselves. Our intention was to have substantial realistic conditions to a certain degree. We still wanted to have light and shadow play a big role, but also be able to intervene at specific points to change the look according to our ideas. It was also important that the shaders could be integrated into existing art pipelines relatively smoothly and wouldn't make features like lightmapping, scene lighting or light probes unusable.

»Without textures, we're very much dependent on the shaders to define the look.«

Even if there had been several iterations before we were happy with the result, the core of the new shading remained till the end. Instead of just defining one basic color for the materials, which was the case when we used the standard Unity shaders, we were now able to mix gradients across the surfaces with four customizable colors.

Since it was important for us to have flexibility and be able to quickly test things, we also built the entire lighting model ourselves instead of using the then existing defaults »Lambert« or »Blinn-Phong«.

The shading of Shift Happens in its final form consists of a selective mixture of lightmap textures, Ambient and Sky Light and a few BRDF-inspired influences which were mixed on the surfaces in real

time. This created quite a high real-time dynamic which has a different effect depending on the location and polyflow of the corresponding model. We were able to use assets several times in one picture section without the environment looking too repetitive. In support of this, we still had the possibility to selectively emphasize interesting locations and to literally put less important locations in the shade.

Advantages and disadvantages

In terms of the workflow, this approach didn't bring only advantages. Sometimes we encountered the problem that it wasn't entirely clear how the colors would mix. After all, the formula wasn't visible to the user of the shader and thus hard to comprehend. The final influence on the overall result was always dependent on the level of detail of the model and on the brightness of the lightmap – the higher the contrast of the light map, the more colorful the scope for the material. Depending on the level of detail of the model, finer gradients were possible, too. With this decision, we had found a solid and easily adjustable style, which could save us time in other places.

The performance which we had to keep an eye on also from a graphical point of view was luckily never really critical, and through selective adjustments of the quality settings we still managed to create a good look even on the lowest settings. As a guideline – especially with regard to future ports for Xbox and PS4 – our goal was never to use more than one directional light to illuminate the scenes in real time.

In case of our characters we had similar problems since they were far too dark in some situations using the standard Unity scene lighting. This was specifically due to the different light settings as it was difficult to constantly illuminate Bismo and Plom in a way that they would be visible in the game. We wanted to create a certain contrast between the characters and our four low-poly stages through the background story anyway, so it was only logical to use our own shading here, too. The characters have a slightly more dynamic influence on the shading than the environment though. This is especially due to the characters moving through the levels; light and shadow should thus have a real-time effect on the characters as well. Hence, we had to experiment a bit until we found the ideal mix of visibility and consistent overall picture.

In the final version of Shift Happens, the characters still reflect the color mood of the stage to a certain degree, but ignore factors like ambient light which, for example, had distorted the original color tone too much. The characters now also have a certain level of self-luminance to compensate for light-probe influences that are too dark. Polishing factors include the slightly shimmering surface and the rim light, which emphasize the form of the characters in the game even more.

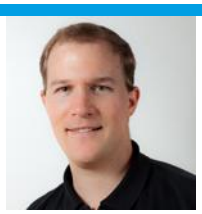
Simon Kratz

Top: Default Unity shading vs. Shift Happens shading.
Bottom: To selectively gain more influence on light and shadow, the team used self-created shaders.

NO SHOW WITHOUT DOUGH!

PAYMENT SYSTEMS FOR ONLINE GAMES

What good is the best game if you can't earn money with it? With a separate payment system, every developer has the opportunity to sell their games directly to the customers, without having to pay high fees to a platform provider.



Stephan Payer
Co-founder of online game developer and provider CipSoft

At CipSoft, Stephan is responsible for finances, staff and internal organization. After having developed the game servers of the online RPGs Tibia and TibiaME for many years, he is now mainly in charge of the central payment system for all CipSoft games. He appreciates if you share your experience on this topic with him at payer@cipsoft.com.

It could all be so easy. Today, you simply publish your games through app stores or other portals, and these partners then take care of the sales and payment processing. They now also support in-game sales and subscriptions and offer libraries for comfortably linking the shop to your game. Great! After all, you want to develop games and not business apps!

So, all is good? Not at all! The platform providers keep up to one third of the sales in return for their services which also include distribution aspects, of course. For a hobby developer, this may seem the most sensible way, simply because it is easy. But when you have reached a certain sales volume, it's worth taking the effort to do the payment processing yourself, especially since the respective technology can be used again for each additional game. After all, there's a well-known saying among business people: »The profit is in purchasing!«

In a three-part series, we shed light on various aspects which are relevant for developing your own payment system. The first part is about basic economic considerations:

- What kind of payment methods are there, and how do they work?
- Which payment methods should you offer in which countries (in case of international distribution)?
- Who are suitable payment providers to offer these payment methods, and what fees will have to be paid?

At the end of the day, you should be able to evaluate what kind of savings potential an adequate payment method has and whether developing a system of your own could pay off for the foreseeable future.

Part 2 will be a technical perspective on the payment system and suggest an architecture to be able to be used flexibly for several games and a large number of payment methods. It will also highlight the particular requirements with regard to the reliability and security of such a system,

which the entire revenues of a company depend on. Finally, part 3 will be dealing with the special topic of »payment fraud« which certainly has to be considered for internet payments. It will offer typical fraud scenarios and how to identify and prevent them.

Payment methods

The classic and still the world's most popular payment method for eCommerce payment is payment by card, which was used for more than half of all payments in 2014 (**image 1**, bottom right). The customer provides the retailer with the number, expiration date and a security code (card validation code, card verification value) of the card, authorizing the payment of the purchase price to the retailer. Depending on the type of card, the customer's account linked to the card will be debited with the corresponding amount either directly (debit card) or at the end of each month (credit card). This transaction involves several parties who obviously all want to earn their share in this:

- the customer's bank which has issued the card and collects the money (issuer)
- the retailer's bank which he submits the payment data to and which pays the money (acquirer)
- maybe a payment service provider who takes care of the technical processing of the payment data submission
- and the credit card organization (e.g. »Visa« or »MasterCard«)

The costs that arise from this amount to approx. 3 to 5 % of the turnover. At least, the fees by the issuers were capped by the EU (MIF regulation) to 0.3% of the turnover at the end of 2015, provided that issuer and retailer are both located within the European Economic Area, which resulted in an overall drop of the costs of about one percentage point [2].

Apart from the credit card, **eWallets** have established themselves as the most important payment alternative. The most popular and internationally operating representative is »PayPal«; regional providers are, for example, »Tenpay« (China), »Yandex.Money« (Russia) and »PagSeguro« (Brazil). The customer authorizes payments in his password-protected eWallet account. If you haven't topped up your eWallet and there isn't enough money for a transaction, a reference bank account or credit card will be directly debited for said amount. The fees, e.g. for PayPal, consist of a fixed fee of 0.35 €, a variable fee of 1.5 to 1.9 % of the turnover, and, where applicable, a border-crossing fee for payments from abroad and, again where applicable, an exchange-rate fee for payments in a foreign currency. Altogether, this amounts to approx. 5 % [3].

Of course, eCommerce transactions may also be proceeded through payment methods known from the »offline world«, such as **bank transfer** (as advanced payment or on account), direct debit and cash on delivery; in these cases, there's a delay between the conclusion of the contract and the payment though. These problems are solved through online transfers like »Sofort« (Germany), »iDeal« (Netherlands) or »Przelewy24« (Poland). The customer uses his online banking access data to execute the transfer determined by the retailer. The fees for this are significantly lower than 5 %.

»Once you reach a certain sales volume, it's worth taking care of the payment processing yourself.«

Those who have no bank account or credit card, maybe due to their young age, can also pay cash: The customer can purchase so-called **prepaid cards** at gas stations or in supermarkets and later authorize online payments by entering the code printed on the card. With **payment slips** (post-paid), payment will be processed after the purchase. With this procedure, the customer prints the displayed barcode or saves it on his smartphone, and then has it scanned at a participating supermarket, which effects payment. The fees of most providers such as »paysafecard« (Europe, pre-paid), »Boleto Bancario« (Brazil, post-paid) or »Todito Cash« (Mexico, pre- and post-paid) can amount to approx. up to 15% due to the involvement of the shop [4].

Last but not least, mobile or smartphones can also be used for online payments (**mobile payment**). During the order process, the customer provides his phone number and

Payment method	Share 2014	Share 2019
Card	56,7%	44,1%
E-Wallet	20,5%	26,7%
Bank transfer	11,4%	12,4%
Cash on delivery	6,6%	6,9%
Pre-paid	2,9%	7,2%
Post-paid	0,3%	0,8%
Others	1,4%	1,5%

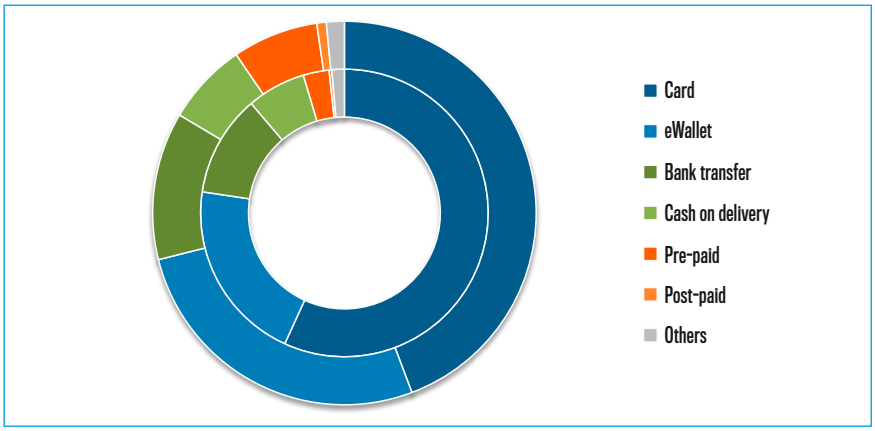


Image 1: Payment method splits in global e-commerce for 2014 (inner ring) and 2019 (outer ring); data from [1].

CipSoft GmbH

CipSoft GmbH was founded in June 2001 and developed from the success of Tibia, one of the world's first MMORPGs, which celebrated its 20th anniversary in January. Being one of the oldest German game developers, the company was able to gradually increase its revenues due to the constantly tremendous popularity among the audience and sustainable growth strategies, and today makes a yearly turnover of nearly ten million euros with a staff of about 90 employees. With the development of TibiaME, a Tibia-inspired mobile adaption, CipSoft released the first online RPG for mobile phones in 2003. As an independent developer studio exclusively financing itself, the Regensburg-based team consequently uses its creative freedom to choose innovative paths to (further) develop their products.

CipSoft distribute their MMORPGs TibiaME and Tibia using their own payment system to avoid having to pay unnecessary fees to platform provides.

then receives a transaction number (TAN) via text message. With this TAN, he can authorize the payment which will later be proceeded through his mobile phone bill. If the order process is integrated in an app, the authorization can even be processed fully automatically. The fees range from below 10% in Sweden to about 20% in Germany to over 70% in Latin America!

Cryptographic payment methods like »bitcoins« should be mentioned, too, but they still play a rather minor role.

Choice of payment methods

The ideal payment method would have a high degree of acceptance, be inexpensive and also secure (the magic triangle of requirements for payment methods) [5]). However, these requirements are in part contradictory, so compromises need to be made. Depending on the business model, additional requirements like the support of recurring payments for subscriptions or particularly high or small payment amounts apply, which rule out certain payment methods a priori.

The dominating criteria here is the **acceptance** of a payment method, which is reflected particularly by how popular it is among potential customers. From a customer's perspective, that includes that it is easy and comfortable to use – ideally anonymously and without a long registration process – and that it is fast, so that the customer promptly receives his purchase. For the retailer, it's important that it's comfortable to integrate it into their own processes, so that they don't have any manual work with it such as matching open items to payment receipts on the account.

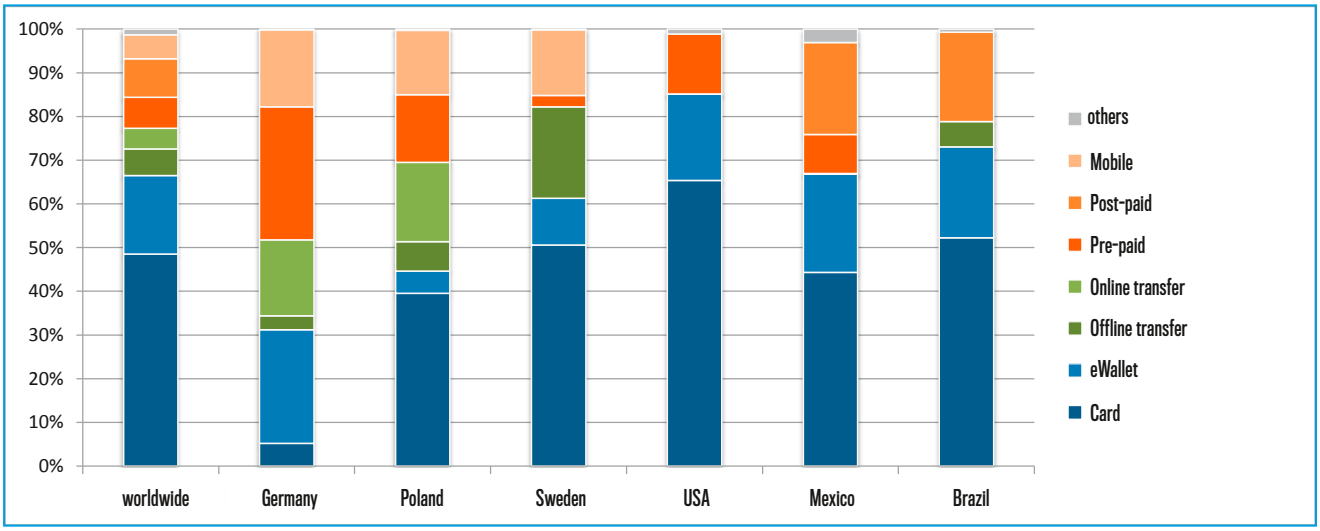
The costs of a payment method not only include the above-mentioned transaction costs, but also one-off costs for the setup (payment service provider fees, integration effort) and recurring transaction-independent costs like basic monthly fees, but also costs caused by payment disruptions, payment defaults and rescissions as well as costs of risk management and support [2].

Security means on the one hand that the retailer receives the requested amount of money quickly and irrevocably and won't have to wait for a while and maybe even send reminders like with purchases on account and that he won't have to do chargebacks like with direct debit or credit card payments. What's important for the customer in this case is the protection against fraud as well as the maximum liability.

Since there is no such thing as the perfect payment method, there should be a selection of different payment methods. The more options, the lower the cancellation rate [5]. The various costs can be passed on to the customers through additional fees, provided that a common and acceptable payment method remains free and the additional fees don't exceed the costs of the retailer. Based on my own experience, it seems that the popularity or comfort of a payment method is often more important for the customers than the additional costs associated with it though.

The split of the various payment methods depends on the target group, especially the age of the customers, and varies widely from country to country. **Image 2** (left page, bottom) shows the split of the payment methods for the online RPG »Tibia« – globally as well as broken down for certain countries. While in most countries card payments prevail, they only reach a low share in Germany. In return, Germany, but also Poland and Sweden prefer online and offline transfers, pre-paid cards and mobile payments, which are used accordingly less outside Europe. eWallets are spread relatively even throughout the world, with

Image 2: Payment method splits for the online RPG Tibia.



a lot of countries clearly preferring regional payment methods like Sofort (Germany), Przelewy24 (Poland) and Boleto Bancario (Brazil).

Selection of payment service providers

What's even more confusing than the diversity of payment methods is the large number of service providers who want to help you proceed payments with these payment methods. While retailers could integrate some payment methods such as PayPal or paysafecard directly, others are required to use a payment service provider. These payment service providers often act as aggregators who bundle a multitude of payment methods and thus make them available with one single integration. This path is a good option particularly to support the many regional payment methods. If some payment methods then prove to be particularly popular, and the direct integration is more convenient, it can still be done.

When looking for a payment service provider, you obviously should focus most on which payment methods they offer and what fees they charge. However, there are some more criteria that are important for a smooth and long-lasting collaboration:

- How complicated is the integration? What's the payment process like for the customer (operability, time, reliability)?
- What's the collaboration like in the day-to-day business (efficient processes, few manual interventions, communication skills, and the competence of the contact partners)?
- Are billing and payment carried out correctly and on time, or are there any unexpected fees or bad exchange rates?

Unfortunately, all these questions can often only be answered in retrospect. That's why you should talk to other retailers who have already had experiences in this respect.

Trust is good, but control is better

It's also recommendable to permanently monitor the payment service provider during the running business relation. At CipSoft, for example, we log errors and system failures, how long it takes to fix them, errors and delays during payment as well as the communication behavior (proactive or reactive, solution-oriented or appeasing), and we pay particular attention to the general trend (improvement or deterioration). In addition, we also monitor reports on cooperations and takeovers as well as published corporate key figures. This way, we can identify deteriorations in the collaboration more objectively and use valid arguments to press the payment service provider for improvements. We also hope to identify extreme developments like a pending insolvency in time, allowing us to terminate the business relation before any payment failures may occur.

Generally, it is recommendable to work with several payment service providers despite the greater effort. For one, customers can quickly and simply be redirected if there are problems. Plus, having alternatives provides you with a better negotiating position. You should, for example, regularly ask for fee reductions in particular since a reduction by one tenth of a percentage point would already mean savings of let's say 1,000 euros for a turnover of one million euros.

»It's generally recommendable to work with several payment service providers despite the greater effort.«

I hope this little discourse sparked your interest in developing your own payment system. In the next part, we will explain how to technically implement such a system.

Stephan Payer

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To each his own: It's important to offer a broad range of payment methods to the customers.

WELCOME TO SAE!
PROGRAMMERS WANTED!

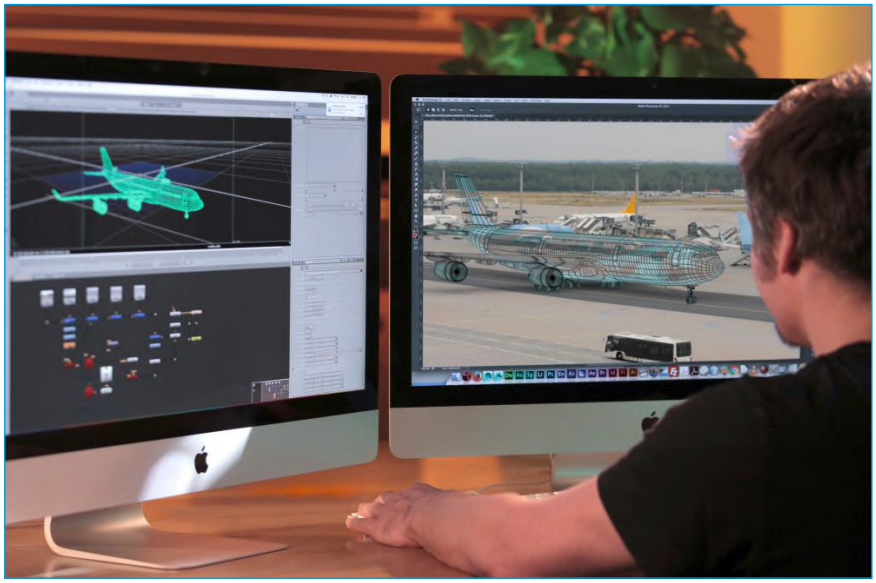
The profession of game programmer is not only versatile and challenging, it's also constantly changing. The education at SAE Institute prepares you perfectly for this journey.

David Hackbarth
Head Lecturer at
SAE Institute Berlin

David is a freelance game programmer and also a lecturer at SAE Institute. He's been an active part of the games industry since 2009, having worked on a large number of projects from PC to mobile to consoles.
de.linkedin.com/in/david-hackbarth-1a624231

The German games industry has changed dramatically over the last ten years. In addition to developers of classic PC and console games, studios for browser and mobile games have radically stirred up the market. Today, they provide by far the most jobs within the German games industry. The increasing professionalization of the studios has also led to fundamental changes in the work of the programmers. Not only must they have knowledge in programming languages; they also have to be familiar with game engines, version control and project management tools. Hence, the job of a programmer consists of much more than developing and implementing algorithms.

Apart from the classic computer science education, there are a number of colleges and universities in Germany, which prepare you very well for working in the games industry. The choice is huge – so it's worth taking a closer look at the various facilities – but more on that later. With our »Games Programming Diploma«, here at SAE Institute we focus on an education with the most practical orientation possible and on preparing our students for a quick career take-off.



Through the practical work at various projects, the students can familiarize themselves with the tools and techniques of game development and programming.

What can you expect from studying »Games Programming«?

Imagine a milking stool. It's got three legs. The education to become a games programmer and the associated requirements have a similar structure. The first »leg« is programming languages. In this part, you get to know various programming languages and learn which one best fits your project. C++, C#, Java or a different one? C++ and C# are the most common programming languages in the games industry, but it's hard to say which one is the better choice. It's really secondary which language you learn; what's more important are the concepts and approaches. How is a program structured? How can I create my code efficiently and with as little maintenance as possible? How can I bring the many different sub-systems together? The language itself is only the means to implement this and is largely dependent on the second leg: the game engine.

30 years ago, games were mostly redesigned and programmed from scratch. Due to the constant development of the hardware and the large number of platforms like PC, consoles, smartphones, etc., this is hardly possible today. That's why most game developers – both AAA studios and indies – use game engines, either developed by the studios themselves or internationally established versions. Working with such engines is therefore an essential part of the education. We mostly work with Unity and thus C# since that one is widespread in Germany. But since especially the big studios work mostly with their own engines, we will also provide insight into Unreal Engine and C++, not only about working with the editor, but also about its tools and how to get the assets into the engine and how to use them.

The third leg of the »milking stool« stands for the team. No team, no game! In addition to programmers, you need artists, game and sound designers, project managers, and many more. Working in a team also holds a lot of risks though, which you have to be prepared for. The education is therefore mainly about working on a lot of projects. That way, you get familiar with version control such as SVN or Git and project management tools. Learning how to work with deadlines is important, too. Arranging yourself with your teammates as well as working together on the same code base and project structure are particularly important experiences to

> »A programmer must be able to do more than develop and implement algorithms.«

In the open »Edit Area« at SAE Institute Bochum, students of all departments can share their experience.

About SAE Institute

SAE Institute was founded in 1976 and has since become the world's biggest private education provider in media production with more than 50 locations in 28 countries. The curriculums are created in accordance with leading industry experts and are constantly updated to meet the requirements of the global creative media industry. With a strong tradition of practical application and recognition within the industry, SAE Institute offers a comprehensive portfolio in creative media sectors (Audio Engineering, Digital Film Production, Game Art Animation, Games Programming, Music Business, Web Design & Development, and Cross Media Production). A Bachelor of Arts/Bachelor of Science can be reached in only two years through a fast-track degree. There are two Master programs (MA/MSc). The Bachelor and Master programs are offered in cooperation with the renowned and state-approved Middlesex University in London as well as Folkwang University in Essen. SAE Institute has a network across six continents with locations in centers of the creative and media economy like London, Berlin, Munich, Paris, Barcelona, Amsterdam, New York, Los Angeles, Bangkok, Sydney, Cape Town, and many more.
http://www.sae.edu/deu/de/games

Andreas Hauber, head of the Game Art department at SAE Institute Cologne explains the VR concept using the HTC Vive.

make since that's what it's all about in your later career.

But of course, the program will also cover topics like mathematics and physics or gameplay mechanics. But what you have to understand most as a game programmer is how engines work »under the hood«. It's not about writing your own engine, but more about knowing the procedures and pipelines in order to be able to optimize your own projects. How does a game loop work? What are game states? How can I change the look of my game? All in all, there is a lot to learn, and the education to become a games programmer is not the right thing for everyone.

What do you need to consider when choosing your education?

Those who fight their way through the many different education choices in Germany are faced with all sorts of options: Game Design, Art, Programming, and much more. Not every study program includes the education to become a games programmer. Sometimes it's rather a course in game design with a little bit of programming; sometimes the education is more technical, where you mostly learn how to write your own engine. Of course, there are also pure programming courses, but again you have the choice between various educational institutes. But which program is the right one for you? If you want to design games, you should obviously look for Game Design classes. If you'd rather create characters and animations, an Art education is your type of choice. And all those who have strong analytical capacities and are good at thinking in abstract ways, should become programmers. But please bear in mind that not all programming courses are the same. If you're particularly interested in game engines and would like to know how they work in detail, you should look for computer science programs at universities. But if you prefer to program games and have a thing for the application and the implementation of game mechanics, you may want to look for respective colleges or private institutes like SAE Institute.

It's worth getting a personal impression of the college or university before deciding on a study program. Taking advantage of an »open house day« or talking to a student advisor might be helpful to get a first look. Getting in touch directly with the students is useful and usually no problem. Apart from the fees, the place of study might also play an important role for your choice, and of course also the question whether the course content suits you. How theoretical or practical do you want your education to be? Is any prior knowledge required? In our institute, for example, you don't have to have any previous knowledge about the development of games. But it's absolutely necessary that you like math, are ready to solve problems and don't shy away if something isn't working the way it should, but that you're able to thoroughly analyze the problem and fix it. Of course, this doesn't mean that students with prior knowledge aren't welcome. Quite the contrary – these students can tackle more advanced topics sooner.

»Just like in any other profession, the rule is: never stop learning!«

Can you specialize in something?

The education makes you familiar with various areas of game programming. As a future programmer, it's important to be able to quickly familiarize yourself with new topics and to get a good overview of all relevant areas. That way, you not only gain an edge over your competitors, but you can also find out which areas suit you best.

But why specialize in a subject? Aren't allrounders everybody's darling? This question can be answered with yes and now. Especially smaller studios favor generalists, but there's been some specializations there as well. Larger teams, on the other hand, look for talent in specialized work areas such as artificial intelligence. That's why you should already find out your preferences during your education and pursue them after your graduation. A specialization doesn't necessarily have to take place on certain mechanics or technical levels, you can also specialize on an academic level. At SAE Institute, for

In the student lounges, students can take a break from work and free their minds.

Trial and Error: The developed games need to be tested, like this VR project using the HTC Vive.

example, the diploma can be extended by a Bachelor's or Master's degree. For the Bachelor, you mainly earn expertise in business, marketing as well as time and project management. But technical specialization and programming, too, are on the agenda. As the highest academic education, you can earn the Master's degree at SAE Institute. The Bachelor and Master are offered in cooperation with Middlesex University in London.

What comes after the education?

When one education is over, the next one begins, and just as in any other profession, the rule is: never stop learning! You always have to stay on top of the game and learn about innovations and trends in programming languages and game engines, but also about new processes and techniques. It's already recommendable during the education to regularly take part in conferences and events as well as visiting relevant portals and websites. They not only benefit your education, but also the networking and exchange. Again and again, people meet new business partners or their future employer that way. At SAE Institute, we offer additional support in the form of »Industry Relations & Career Coaches« (IRCCs). An IRCC supports the students already during their studies, getting an idea of the strengths and weaknesses, interests and preferences of every single student. They give advice on applications and establish industry contacts. You may also get discounts on conferences and special lectures by industry veterans.

And the job prospects? Don't be fooled if game developers cut jobs or become bankrupt. The number of jobs in the German games industry has doubled in the past ten years, and as a game programmer you're still very sought-after – outside the games industry, too, by the way.

No matter what kind of education you will go for, no matter what institute you will choose, and no matter whether you're a noob or a pro: The most important thing is to complete as many projects as possible. It's not about having commercial success after their release, but about completing projects and further developing your expertise. Show the employers that that's what you want to do and that you can't wait to join their team. Because remember: Programmers wanted – desperately!

David Hackbarth

Games Programming diploma modules

- Introduction to games programming
- Applied mathematics and environment programming
- Network programming and tool development
- Graphics and shader programming for games

Conferences and websites

QUO VADIS
http://qvconf.com
devcom
http://www.devcom.global/
Game Developer Conference
http://www.gdconf.com/
Nordic Game Conference
http://conf.nordicgame.com/
Unite
https://unite.unity.com/
Gamasutra
http://www.gamasutra.com/

Job pages

Games Jobs Germany
http://gamesjobsgermany.de/
Games Career
https://www.games-career.com
Making Games Jobs
http://www.makinggames.biz/jobs
Unity Connect
https://connect.unity.com/

THE CREATIVE PROCESS BEHIND ELVENAR

Creating features like new races and making them stand out of, is a challenging task. Developing a thorough production art process beforehand helps – »Elvenar's« former Art Lead Omar Siu shares his experience.

Omar Siu
is former Art Lead for Elvenar.

In a sea of similar-looking games, some studios have an increasingly difficult time making their products stand out. Those that do, understand the power of a deeply credible aesthetic, to enhance the narrative. Art Leads need to find sustainable working cycles that fit their needs and meet the constant demands of the game and its players.

At »Elvenar«, InnoGames' first fantasy city-builder, our challenge was to incorporate the game's universe with new »guest races« – a feature that introduces other fantastical creatures and beings, in addition to building and maintaining their city of Humans or Elves. Elvenar has a unique flavor in many ways, which influences how we approach our art. You can choose to follow a Human or Elves theme, giving us a huge variety off assets to create and our demographic is quite an even split between male and female players. Meaning we don't simply exploit the typical male orientated tropes for the new races. Instead, we are smart in our execution so we can reflect our desire for diversity and engage with a wider audience. We always aim to deliver a fantasy race, which satisfies expectations, yet has a broad appeal, without compromising the theme. These are the main reasons for the depths we go to with the research and exploration.

Fortunately, we have three exceptional concept artists on Elvenar: Denis Loebner, Sebastian Schulz, and Christopher Karbach. These guys are experts in their field, with their deep knowledge and passion for fantasy we are able to reinforce our creations with historic credibility and substance. They each offer a valuable insight and ultimately

base construction
base construction + bridge
schematic height diagram
Animation:
2 Sorcerers (Sorcerer NPCs, male and female) are standing around, reading books. The female one stands in front of the staircase which leads downwards to the basement, 2 books fly around her head like birds. She flips pages.
The male sorcerer reads in a book and uses his staff to cast a low light so he can read.
The skullformation floats slowly in the air (up and down movement + some tilting to give a threedimensional feel - as slow and subdued as possible). Waterfalls pour out of the mouths and eysockets on each side of the bridge, falling into a basin located below the bridge (the basin is located a littlebit below the groundlevel). Steam and fog rises around the bridge (use the fog aswell to separate background/forground and to quieten the noiselevel a bit).
The altitude shown in the concept represents the maximum height.
4 torches burn on the sidecolumns of the bridge, casting a low and gloomy light.
The bookshelves float slowly aswell (again tilting + up and down movement, slow).

Three concept artists create up to 70 new designs in about two and a half months – without a proper production process this would hardly be managable.

do most of the heavy lifting when it comes to creating each new race.

The production cycle for each new race follows back to back as our players really love the game and are always looking for something new. In total, we have three concept artists who create up to 70 new designs in two and a half months, which is really a massive output for two weeks of pre-production, followed by two months of production. So instead of betting on creative flights of fantasy, our experience and focus are key to our success. We therefore streamline and concentrate our processes. While this may sound counter-intuitive when we're considering a highly creative environment, it actually made us more creative, and highly collaborative as a team. We know when to go with an idea and run with it, rather than deliberating too long. We have a process in place which gave us a huge amount of confidence in the execution, ultimately setting us up to succeed.

Brainstorming the right way

Firstly, we look at the data – the player surveys or player requests – and we consider a suitably contrasting race to follow up with. We listen to and value our players' opinions and do our best to satisfy and deliver to their expectations. Each new race follows this tried and tested process, case in point is the »Sorcerers & Dragons«, which have been highly requested by our players. The challenge was to create a theme, which was fitting to the expectations of Elvenar, both in aesthetic and narrative, and satisfying our broad demographic. Our first step is always to bring the team together for different points of views. The invite spreads across disciplines, including game designers, coders, project managers, etc. to maximize the variety of perspectives. However, diverse viewpoints are not enough for a successful and efficient brainstorming-session. You need to have a set of categories and questions to speed up the process. While approaches to brainstorming may vary, lacking a goal or broad target can make it difficult to find a focus, otherwise we'd be lost in a wide scope of ambiguity for too long. For us, we use the following key topics for each potential race:

- What is their magic/spell-work/type of enchantment?
- What do they produce/manufacture/craft? What is their lifestyle?
- Their personality/character/temperament?

Each question gives us an insight into specific factors and crucial elements to help us form a credible narrative.

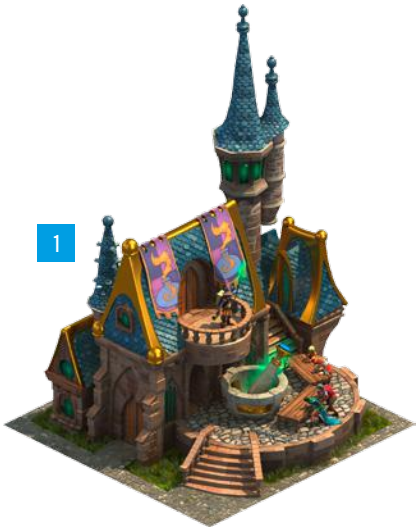
As magic is important in Elvenar, the new race should have a type of magic which works to compliment and contrast the previous races, the spell work we choose also informs the personality of the new race. Wood Elves, for example, were powerful, yet elegant and composed, compared to the Sorcerers, who are theatrical and often careless with their experimentation. Defining the spell-work requires us to identify

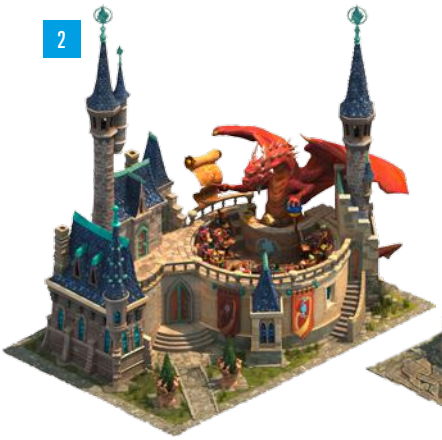
Concept art for Elvenar's Sorceress.

Every design process starts with pre-production sketches and loads of concept art.

key supporting elements which add depth to their motives. Defining their lifestyle and temperament helps to inform their societies and their habitat – it informs the architecture and the social spaces within the community and identifies their level of engineering capabilities. Ideas for their cultural hierarchies, beliefs, and traditions begin forming quite naturally and cohesively.

As the ideas accumulate, connections begin to form between the categories and the narrative develops. Momentum gathers as we roll with the ideas, and when it becomes easier to build upon the narrative, we know it's on a successful path. By the time we've exhausted ourselves of new ideas, we should have an abundance of ideas to work with. We normally spend up to three hours to complete a brainstorming-session. We do this by preparing mood boards for inspiration, and take in laptops and tablets for quick reference and fact checking in order to keep the energy high, and the ideas flowing rapidly.





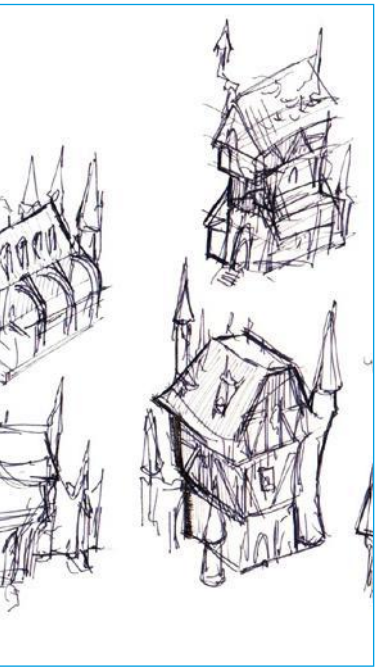
1 Alchemist Faculty
2 Arcane Magic Faculty
3 Scrolls Manufactury

Research forms content

Research of a guest race is essential because it forms content. It gives us the depth, substance and credibility to our concepts. Firstly, it is essential to understand the common perceptions and tropes of the races. How are they commonly perceived by the public? What are notable examples? We consider how they are portrayed in movies, books, comics, common myths, historic interpretations, etc. Without this understanding we cannot create something credible, which also meets the expectations of our players. With this understanding, we can gauge how much creative liberties we can apply for a hint of originality, without compromising the expectations.

Additionally, drawing from real-world inspiration, such as a specific historic culture from somewhere on the planet helps to support our limited pre-production period. It's a bountiful reference point, immediately giving us an aesthetic cohesion when we delve into the textiles, jewelry, architecture and weaponry, and an understanding of their level of engineering as well as sociological factors. The Mongolian culture, for example, influenced our »Orcs & Goblins«, while the Dragons & Sorcerers were inspired by early gothic culture.

All these references are compiled into physical mood boards and hung around the Elvenar Art Room. All its walls are covered, making it an essential part of our process. It's no good having hundreds of images tucked



Every building-design's goal is to represent some of a race's defining traits - like huge tentacles complementing the necromancer's grim attitude.

away on your hard drive. Get it up on the walls where your team can discuss the ideas and fully digest the details. We're too used to flicking through digital images and garnering impressions of them – it's the equivalent of running through an art gallery. By having them up on the wall, the team can fully immerse into the theme, and fully digest the details in greater depth. Our reference points would all be similar and we're literally all on the same page when we point to key sources of inspiration.

Finally, to get the most out of our research, we explore and experiment with the concept sketches. It's the best way to find new ideas in a short amount of time and strengthen the narrative. It's important for the artists to have the opportunity to freely explore the extremities of ideas by experimenting with detail, proportion, colors and composition. By doing this, they challenge their own perceptions and break free from preconceptions. Normally, we dedicate nine days to the research and exploration phase.

Implementing in a streamlined process

Economizing efforts and pushing for the utmost clarity in the concepts is our ultimate goal, before forwarding them to our outsource partners for 3D production. We use a modular system for 2D and 3D, so the kit parts can be shared between artists, saving time on rendering and modeling. The expertise and skill come in being able to define the key parts which we can modulate, without compromising the quality our players have come to expect. As the majority of our 3D production is outsourced, we've built up a great relationship with our outsource partners.

We have two exceptional 3D Artists – Nicolas Villarreal and Jan-Lorenz Siepe – in-house, who are at the front line of the communication and review process to make things flow smoothly. They take complete ownership of the pipeline, juggling hundreds of assets at a time. At some points, they'll have two races overlapping in production. Logistically, this can easily become a mess if it's not organized well, but we have steps and fail-safes in place to keep everything in order.

With each new creation, the concept artist creates a brief, adding details, reference and text explanations. This is reviewed by the 3D artists for clarity, and only when it passes this stage, it moves on to outsourcing for production. »You get out what you put in« – therefore clarity within the brief is of the utmost importance. Any ambiguity you have to pay for in valuable time, with review cycles going back and forth. Therefore it's crucial we have all the key details and elements included in a brief.

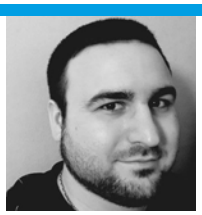
The prospect of creating a new race feature can be daunting, so it pays to have a streamlined and thorough process. By repeating this process, we can continually refine the way we do things, ironing out the inefficiencies. We set ourselves up to succeed, and in doing that, we have never failed to deliver on all the demands. We are more inventive and creative with our solutions, and a successful process has been born from the determination and ambition of the Elvenar art team, to deliver even more compelling assets to our players.

Omar Siu

»We're too used to flicking through digital images and garnering impressions - it's the equivalent of running through an art gallery.«

SYSTEMIC FEEDBACK IN COMPETITIVE GAMES

Proper feedback is key to becoming better – in anything we do. Systemic feedback is essential to help players understand what they are doing and how they can use this information to improve.



Fabian Fischer
Game Designer
at Travian Games

Fabian considers games a unique form of art that deserves to be analysed accordingly. He has been writing critical articles focused on systems design and ludology for several years, for his personal blog Ludokultur.de as well as many other websites and magazines.

Feedback is without a doubt central for games of any kind. It is a core element in the interaction between player and gameplay system. The player's actions are processed by the ruleset, possibly under the influence of an opponent, before the system reacts in a specific way. The information the player receives by observing this reaction will then help him hone his mental model of the system and thus improve his skill. Feedback closes the gameplay cycle, thus facilitating a process of iterative learning. This is essentially how competitive, i.e. skill-based, games generate fun.

Audiovisual feedback, sometimes also called »game feel«, conveys small-scale lessons about rather immediate factors such as the controls, dexterity or reflexes. Understanding the rules and how they relate to each other only plays a secondary role. In contrast to that, systemic feedback is all about long-term improvement of the player's grasp of the gameplay intricacies. It is tightly coupled to the result of a match in the form of a win or a loss. All actions are evaluated in the context of the game's goal and thus gain a specific qualitative significance.

The closer an action takes the player to victory, the better it generally is. Only by processing systemic feedback will the player be able to evaluate his position and direction along this »goal axis« of the game and thus learn from his actions. The following sections of this article will try to shed some light on the characteristics of efficient systemic feedback, regarding gameplay itself as well as potential metagame structures.

Causality

At first let's look at the concrete feedback a player receives immediately while playing.

Most modern video games are not stingy with extensive feedback.

It is absolutely essential that this feedback is comprehensible, so that the competitive learning cycle can get started. Therefore actions over the course of the game should ideally be causally related to each other. This principle, by the way, is also known in storytelling. The recipient of the story can ascribe much more meaning to a sequence of actions of the form »X, therefore Y, therefore Z« compared to something like »X, then Y, then Z« which seems rather arbitrary.

Player actions should have concrete relations to other actions and events. The result at the end of the game will be able to charge a strong causal action chain all throughout, either positively (victory) or negatively (defeat). Now players can backtrack step-by-step how the outcome came about. The analysis of these aspects often happens subconsciously while playing the game. However it can also be done after the fact, for instance with the aid of a replay.

Weak action chains on the other hand are severed by systemic distortions (»noise«). An element that can cause this is for example unfair randomness that affects the quality of an action post hoc. This adds unsubstantial connections (»and then ... «) to the sequence of play. This has ripple effects all throughout the course of the match. Players would have to specifically »subtract out« the influence of the unfairly random effects when analyzing the gameplay. This can, however, be extremely difficult, depending on the system at hand. Thus, wrong conclusions could easily be drawn and misinformation internalized, which of course leads to a much less efficient learning process.

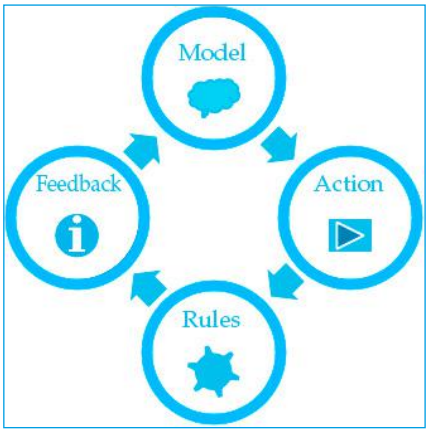
Reliability

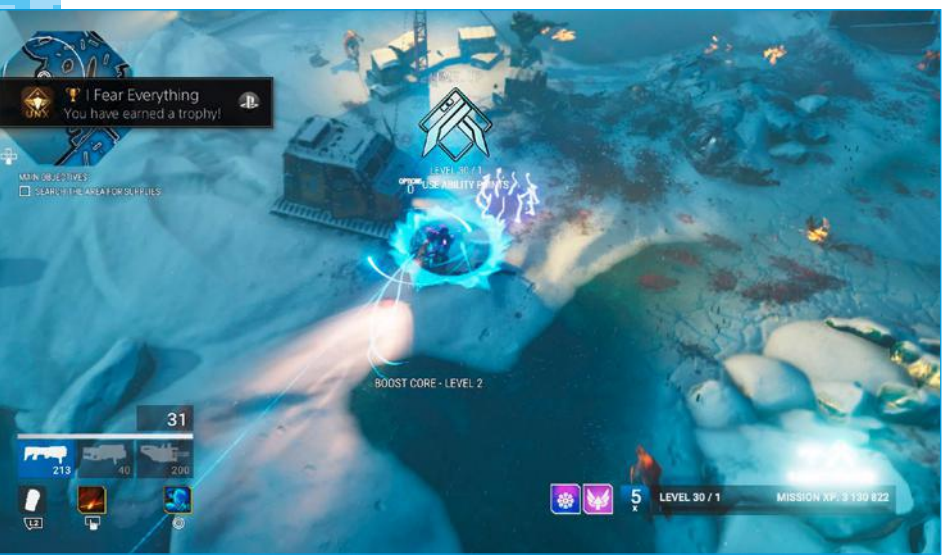
Another positive implication of a strong causal chain is how much more reliable it makes the systemic feedback. If the result of a match can easily be traced back to the beginning, then there is a good chance that it accurately reflects the skill of the players involved (Keith Burgun calls this metric »goal feedback efficiency«).

> »The closer an action takes the player to victory, the better it generally is.«

As a side note, hidden information can impair the reliability of the feedback, even though it is in itself a valuable design tool. The key, once again, lies in striking a balance: On one hand the game should not be so solvable that it breaks down to a pure contest of calculation. On the other hand it has to be deterministic enough to send reliable feedback signals in most cases.

A common model of the iterative learning cycle players go through.



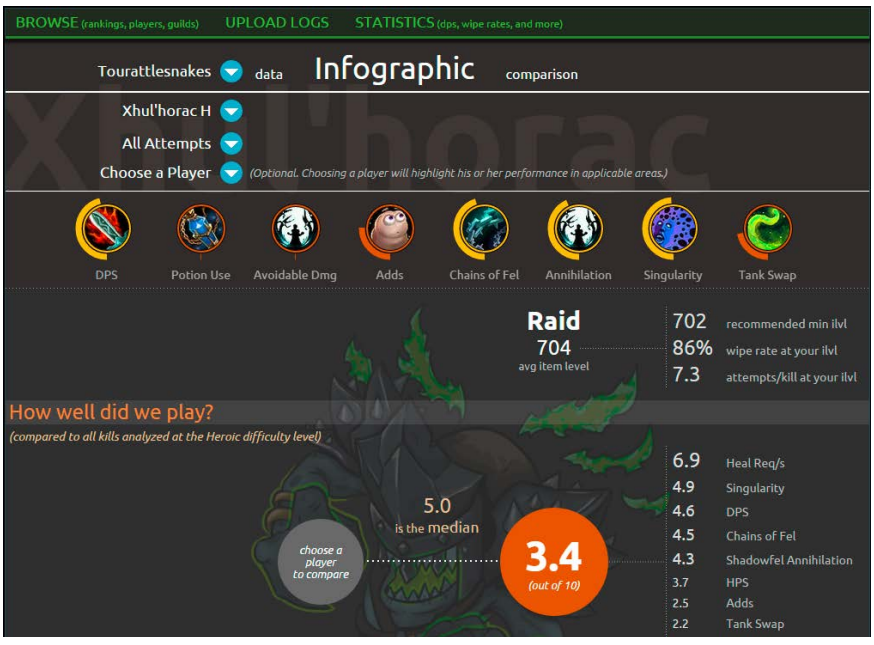


Systemic feedback needs to be clear and easy to understand for players to adequately analyse it.

After all finding this balance during gameplay is not enough though. Even before a match starts, there can be an imbalance if the changes of winning are not distributed fairly between all players, e.g. due to bad matchmaking or inherently over- or underpowered gameplay elements. Assuming one side in a duel between two players has a chance of winning as high as 90 percent: In this case the advantaged player could make relatively many wrong decisions without actually losing the game in the end. In other words, he could play worse than his opponent, measured against his own skill. If he still wins, the game sends fundamentally wrong feedback. Optimally efficient feedback in games with one or two player factions always requires a success rate of 50 percent.

»Optimally efficient feedback in games always requires a success rate of 50 percent.«

Websites and tools like AskMrRobot for World of Warcraft gather lots of live data which can help identify good and bad decisions in hindsight."



Adaptability

Reaching this probability is also the goal of a classic matchmaking system. It is supposed to confront the player with challenges tailored to his personal skill level. Since most players will increase their skill in a competitive game over time, this also means that the matchmaking has to adapt accordingly and for example match players with stronger opponents. In multiplayer games this is a well-established paradigm that can be found in all kinds of ladder, ranking or league systems in almost any modern title.

The equivalent for single-player games is far less prevalent, even though dynamically adjusting the difficulty would be just as important for the player to steadily receive efficient feedback. Auro recently laid a possible foundation with its »single-player Elo system«. Every match is self-contained and can equally be won or lost. In between playthroughs different aspects of the game system, such as the level generator or the goal, are tweaked to adapt to the player's skill. This metagame approach was recently revisited in multiple titles by BrainGoodGames, as well as Zach Gage's »Really Bad Chess«. It is, however, still far from being a standard format, even though the clear win/loss structure avoids countless problems of the obsolete highscore model: Session length and win rate stay constant instead of converging to infinity or zero respectively, the risk management does not break down to a trivial »All or nothing!« And prematurely conceding matches due to unfavorable randomness is also out of the question. Every match counts and potentially conveys valuable insights.

Regularity

To be able to make comprehensive use of that information, the player should be able

Lin Kuei 31
L1 SORT: ONLINE ID ASCENDING R1
WIN/LOSS 9/14
WIN ODDS 60%
PLAYING Versus
ROOM MATCHMAKING
INVASION CHALLENGES (0/3)
LEADERBOARDS: Driven_nyc is #3 on the survivor leaderboard with a record of 44
SHOW OPTIONS CHAT REFRESH SORT HIGHLIGHT MY KOMBAT KAR

to interpret systemic feedback as regularly as possible. That means he has to traverse full iterations of the gameplay cycle, from the beginning of the game to the end. The course of actions only gains concrete meaning in the light of completion. Therefore a full transition, generally a match, should be as short as possible. Of course there needs to be enough time for the system to unfold its full depth. However, extraneous filler elements should be avoided as much as possible.

As an aside, there is a very practical argument to this guideline: People forget things over time. If a player performs an action and does not learn whether it made sense or not until hours later, the feedback will be diluted. The player will not be able to properly reconstruct the sequence of actions anymore. Ideally players should be able to maintain a coherent mental image of the match structure at all times: »How did the current situation come about? What does it mean for my position and the further course of action? What exactly do I want to achieve?« If the player is able to at least roughly answer all these questions, he will also be able to cognitively process the system's feedback.

Swarm Intelligence

Finally, speaking of matchmaking there is one factor that is crucial for any modern multiplayer game: the collective intelligence of its player base. If enough players are involved in the competition, a very granular ranking system will form pretty much on its own without too much design effort necessary. The gaps in the »skill ladder« become smaller and smaller, the more players there are, thus increasing the matchmaking potential dramatically and allowing for an accurate long-term assessment of players' capabilities. In contrast to single-player systems, no values or rules have to be manipulated to generate harder and harder challenges. Players are simply matched with stronger opponents over time. The last step is indeed being the »best player in the world« and not just a more or less arbitrary point where the game system becomes too hard to beat. This circumstance gives skill-based multiplayer titles a huge advantage over their single-player counterparts if they manage to accumulate sufficient player numbers.

Summary

In the end most players are of course not directly concerned with becoming the »best in the world«. However they all want to learn, get better, gain competence. That is the unique appeal of competitive games. Good systemic feedback directly supports this pursuit by delivering essential and nonarbitrary pieces of information to players, thus facilitating motivation and preventing frustration.

> »Most players aren't concerned with becoming the best in the world. However, they all want to learn, get better, gain comptence.«

To sum it up: If the reasons for the result of a match are comprehensible (Causality) and valuable lessons can reliably be drawn from those (Reliability), then the game's specific learning process can be initiated. Its efficiency, and therefore »fun«, can constantly be kept at a high level as long as challenges are continuously (Regularity) adapted to the player's skill level (Adaptability).

Fabian Fischer

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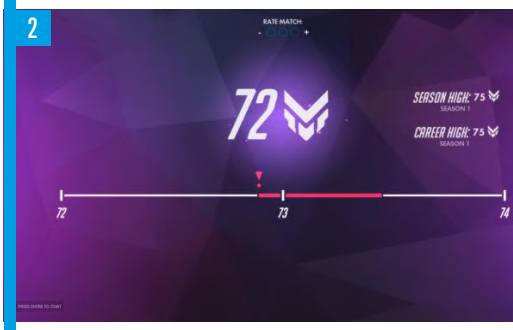

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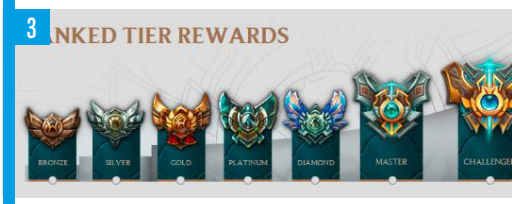

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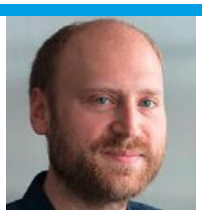
5

1 After a match in Overwatch players may vote for an MVP. 2 Matchmaking ratings inform the player about his actual status. 3 The better, the more decorated: League of Legends (like other competitive games) rewards players with special medals. 4 So does Call of Duty, where players can also earn special tags after completing specific challenges. 5 Rules need to be clear. Too much chaos prohibits proper feedback and therefore improvement.

GAMIFICATION

CREATING VALUE THROUGH GAMES

Life is just a game – several artists have sung about that. Meanwhile, Marc Sodermanns explains how gamification can help us master our sometimes-tiresome everyday life in a gamified way.



Marc Sodermanns
Art Director at Palmer Hargreaves

Marc worked in the games industry for four years. He worked at Funatics Software and Blue Byte GmbH, among others, and he was a Game and UI/UX Designer at Ubisoft. He is also a freelance Game, UI/UX and Motion Designer. After four years in the games industry, he is now in the advertising industry, working as Art Director at Palmer Hargreaves where he is particularly in charge of the digital department. He still is a passionate gamer.

Gamification is one of the most present buzzwords of the last few years. Some companies now specialize on this and extend their performance spectrum in that respect. But what exactly is gamification? Which methods are there to use it, and what's the benefit and profit? In this article, I will try to shed some light on the topic and hopefully also reach readers who have been familiar with gamification for a while already to introduce new and interesting approaches to them, too.

Early Days

I first came across the subject of gamification in 2010. In his talk »When Games Invade Real Life« at DICE Summit 2010, Jesse Schell, a top game design expert, author of the famous book »The Art of Game Design« and owner of SchellGames talked about game elements already applied in our everyday life. This lecture triggered us to start thinking outside the box and applying our expertise beyond the gaming world.
In game development, these approaches were already reflected in games like »Guitar Hero« or »Sing Star«, which were already moving beyond the mere gaming world. Guitar Hero, for example, is played on a controller designed like a guitar, and in Sing Star, your input device is a microphone. Further developments included Facebook games where you log in with your own account to play with your real friends or challenge them directly.
The console manufacturers Sony, Nintendo

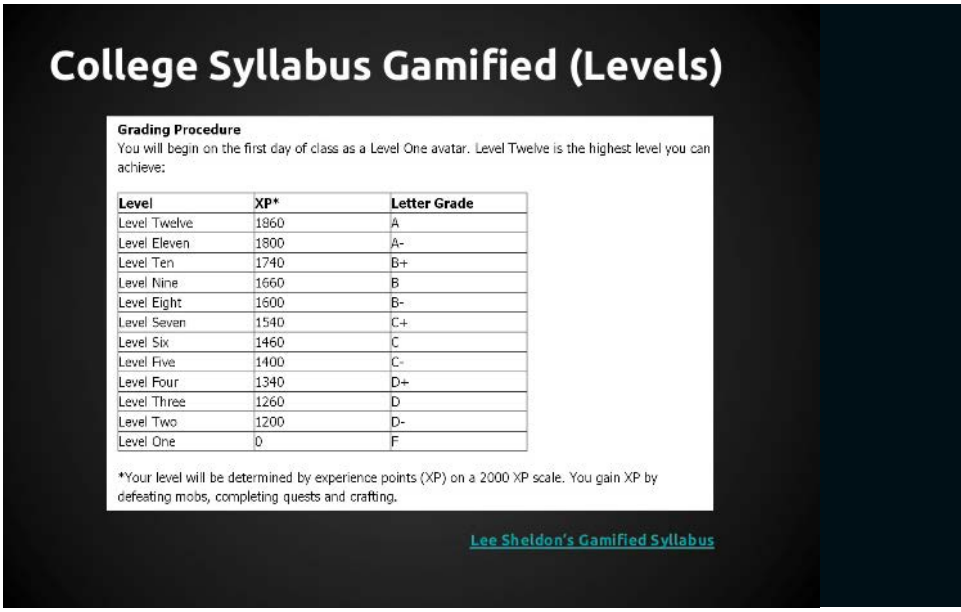
and Microsoft, on the other hand, introduced achievement systems which were sort of extended »scoring systems«. These were and still are usually of a purely cosmetic nature. This means that they don't have a deeper purpose in the game, but are rather just medals; level or ranking systems which serve as a progress indicator for the players to give them »bragging rights«. All these examples break the barrier to reality in a gamified way. A development which game designers first had to get used to since realism was until then rather based on visual realism or in its gaming context. People mainly played computer games to escape the real world.

In his presentation, Schell already showed off first »gamified« concepts. He talked about an approach to improve people's driving awareness through gamified ideas. A Ford hybrid is showing a plant in the cockpit. The more fuel you save, the bigger the plant gets – a kind of »tamagotchi« for your car so-to-speak. This not only affected the people's driving behavior, but also reduced the user's – the driver's – expenses on fuel. This project wasn't developed by professional game designers though.

First Gamification Approaches

Game designer Lee Sheldon developed a very interesting method to determine school grades. He introduced »experience points« as known from games at schools and used them instead of grades. The students' grades were then determined through »level-ups«. The system was very well received and resulted in higher attention and motivation of the school kids on the one hand, and on the other hand, the school benefited from a better structure and clear arrangement.

Schell also provided an outlook as to what extent gamified processes could enter our personal and daily lives, for example, to take established bonus point systems to another level or to gamify daily routines like getting up or brushing your teeth. One possibility would be to link these processes to bonus or reward systems. For example, you would earn points and various bonuses based on how thorough you brush your teeth. This encourages regular oral hygiene and has a positive effect on dental health, which again relieves the health insurance companies. And the toothpaste manufacturer is happy about the higher toothpaste consumption. These gamified ideas can be applied to further daily processes. During breakfast, you collect points when eating the cornflakes of brand XY. On the back of the box is a free mini-game which you can play while you eat – of course, that game is linked to Facebook or a similar type of media through which you can challenge your friends. You collect points when you take public transport to protect the environment. You can also earn special bonuses when arriving at work on time or for wearing digital tattoos which can be adapted anytime and thus serve as advertising media. You collect further points for visiting a certain restaurant during your lunch break and ordering a specific menu. You get bonuses for wearing special shoes which track steps and distances and tell you exactly how much you move. These rewards are given through the healthcare system. Ideas like this can be continued in any way, and it's pretty clear already how much potential there is in gamification and its link to our daily routines.


College Syllabus Gamified (Levels)
Grading Procedure
You will begin on the first day of class as a Level One avatar. Level Twelve is the highest level you can achieve:
Level | XP* | Letter Grade
Level Twelve | 1860 | A
Level Eleven | 1800 | A-
Level Ten | 1740 | B+
Level Nine | 1660 | B
Level Eight | 1600 | B-
Level Seven | 1540 | C+
Level Six | 1460 | C
Level Five | 1400 | C-
Level Four | 1340 | D+
Level Three | 1260 | D
Level Two | 1200 | D-
Level One | 0 | F
*Your level will be determined by experience points (XP) on a 2000 XP scale. You gain XP by defeating mobs, completing quests and crafting.
Lee Sheldon's Gamified Syllabus

»XP« for better grades: Lee Sheldon's »Level up« system was very well received at test schools (source: https://www.slideshare.net/autnes).

Present Day

Schell gave a number of interesting examples about how the many playful approaches could be integrated into our daily life. Six years later, some of his visions have actually been put into practice, at least to some extent. But before we get into gamification in detail and look at some application examples, I would like to provide a brief explanation of the terms »game« and »play«. A term that's often used in context with gamification is »game« or »gaming«, which, strictly speaking, is different from »playing«.

Level 1.0: Game vs. Play

Level 1.1: Game

What exactly is a game? Several game designers and philosophers have addressed this issue; a more precise definition of the term »game« is not possible, according to the famous philosopher Ludwig Wittgenstein. In »Philosophical Investigations Aphorism 68« he writes: »For how is the

Oh, sweet gamification: Sweets manufacturer M&M's increased its reach on Facebook with the help of simple search games.

M&M's U.S.A.
Like Page
Oh no! I've lost pretzel guy! Can you help me spot him? – Orange — with and 35 others.
Like · Comment · Share · 24,521 10,132 5,615
Sponsored

concept of a game bounded? What still counts as a game and what no longer does? Can you give the boundary? No.«
The author Bernhard Suits, on the other hand, states in his book »The Grasshopper: Games, Life and Utopia« that we can very well define what's a game. All games can be determined by three concepts:

- Prelusory goal
- Constitutive rules
- Voluntarily overcoming unnecessary obstacles

In detail, this means that a game consists of a goal/goals, rules as well as a feedback system and is played voluntarily (intrinsic motivation). Huizinga writes in his book »Homo Ludens« about the magic circle (see graphic below), which differentiates or separates the game world from reality. In a game, there's a physical and a virtual boundary, like the sidelines of a football pitch. When you're in the game world, only the rules of the game apply, not the ones of the real world. I think Sid Meier, game designer of the game series »Civilization« or »Pirates« nailed it when he said: »A game is a series of meaningful choices«. As Jesse Schell already put it, a game is a problem-solving activity in a playful manner.

»Play is an aimless expenditure of exuberant energy.«

George Santayana (philosopher)

Level 1.2: Play

Friedrich Schiller described the term »play« in the following way:
»Play is the aimless expenditure of exuberant energy«. The philosopher George Santayana considers »play« to be whatever is done spontaneously and for its own sake. Katie Salen and Eric Zimmerman, on the other hand, describe »play« in their interesting book »Rules of Play« as »free movement within a more rigid structure«. The game has no purpose, is played for its own sake and allows, where possible, the feeling of freedom and exuberance without fixed rules or goals.

Level 1.3: Serious Games

The term »Gamification« is often used in context with the related concept of »Serious Gaming«, meaning games whose aim goes beyond pure entertainment. Examples for this are 3D computer programs where, for example, fires have to be put out in the most effective way possible, or flight simulators where the user carries out take-off and landing maneuvers. Besides the gaming aspect, these programs can have learning and training effects which are important for the training of firefighters or pilots respectively. So, Serious Games are games which (additionally) serve a serious and productive purpose. In contrast to this, gamification uses gaming elements to add to processes yielding added value and thus create a positive effect.
Gamification and serious games basically represent the same approach by transferring the positive qualities of a motivating and inspiring type of media to other contexts and purposes beyond the entertainment value.

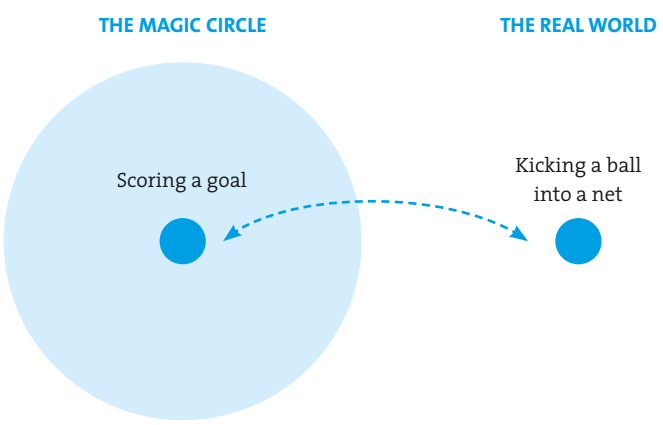
Level 2: What is gamification?

After this brief excursion, let's get back to the actual topic:
Gamification means to create processes which have a certain monotony about them in an intriguing and motivating way – i.e. transferring game-typical elements into non-gaming contexts. To do this, elements from the gaming theory are embedded in processes which don't have a lot or even nothing to do with games. The modified experience motivates the user more to fulfill complex or simply boring tasks. Motivation and seduction make it possible to create long-lasting results.
The important thing in this process is that the users can see and understand the progress of their actions. This process can be portrayed in different ways, for example through awards, progress or level indicators, defining the status of the user. Gamification must always happen on a voluntary basis; it should never be forced upon the user. Unlike games, you can't lose in gamified products, and the user always gets positive feedback. Once won, badges won't be taken away again, under no circumstances.

Level 2.1: Gamification Elements And Applications:

In his book »Web Fatale«, Johannes Ippen provides an excellent list of various gamification elements. This may, for example, be highscores. The user can compete with

The Magic Circle



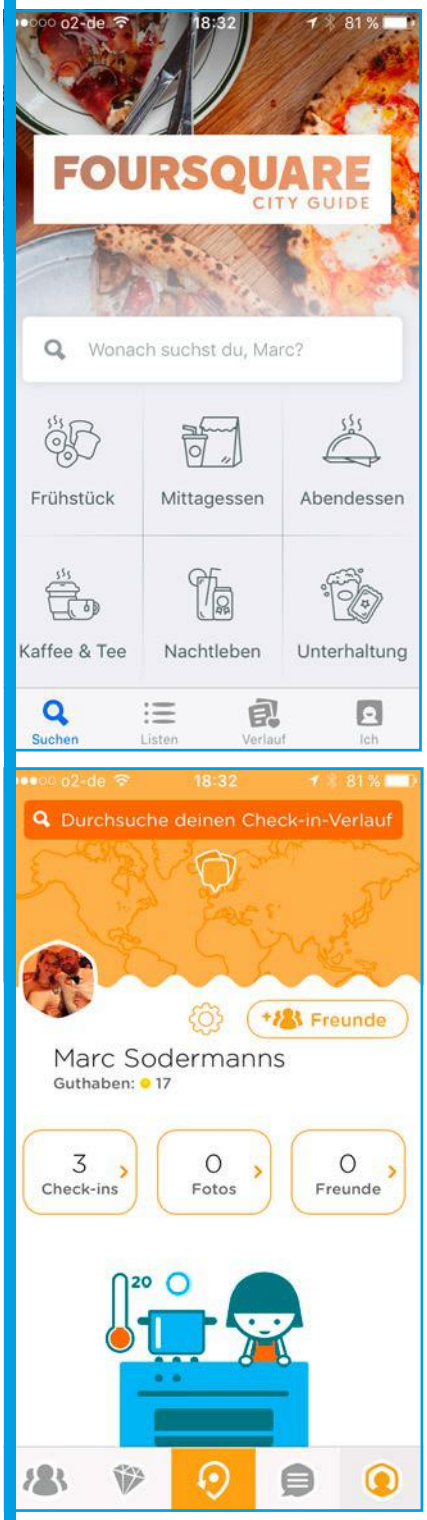
others or with himself, for example in rankings or through top-ten selections. Or he can compete and compare himself with others via missions. This gives the user something to do – a task – and he should never be left alone in the interface, but always be presented with a task or some kind of orientation.
Just like in other game-typical applications, the important thing is to get feedback. Every action causes a reaction, no matter whether micro (small) or macro (big) feedback. Every reaction should be comprehensible and transparent and be explained the first time, in case of doubt, for example via pop-up or a slowed-down animation. Also, all actions should be meaningful, and the user should always be motivated by the »big picture«, which we, the developers, should regularly remind him of. The more realistic the application, the bigger the learning effect and the satisfaction after completion. The social component, the act of playing together, is also an important element since it's just much more fun to do it with friends – not only the competition, but also the sharing, the recommendations and the mutual complementation. And last but not least: Don't overload the user with information, but rather provide him with features and details bit by bit and only where really necessary. All of these elements are clearly taken from game development and game design.

Level 2.2: Where Is Gamification Happening?

A lot of big companies like Nike, SAP, Dell, Universal Music, Samsung, and many more use gamification methods, and the number is constantly on the rise. These days, games are »powerful things« which – when specifically used for gamification purposes – can create a very high added value. It's important to evaluate which gamification approaches are eligible and how they can be implemented according to a company's needs both technically and with regard to their characteristics. The design of the gamification functions should be as intuitively usable and comprehensible as possible and the complexity be kept at a minimum to avoid a cognitive overload which may disrupt the game-like concept.
Externally, gamification is used for clients in marketing, sales and customer service; internally, it's applied in departments like HR or to increase productivity. The most prominent example would be the game developer Wooga. Wooga used gamification to increase the internal productivity and motivation. For example, the employees receive badges for special actions like spotting and fixing a software bug or for completing 100 levels in a Wooga game. These badges are displayed in an internal staff data base and help determine the status within the company.
Gamification can also be used for fostering behavioral changes, for example in healthcare, sustainability or finances. An interesting project carried out in Stockholm was a speed check where a camera measured and showed the speed the cars had. It took pictures of drivers who broke the speed limit and who were then fined – nothing unusual so far. But the camera also took pictures of those drivers who stuck precisely to the given speed limit. The latter ones automatically took part in a lottery and, with a bit of luck, received a price money as a reward for driving reasonably. This led to a reduction of the average speed in Stockholm from 32 to 25 km/h. It was the best of both worlds: The drivers had the chance to win money, while the government could lower its own costs.
Credit rating/bonus programs are already an established and popular system, to pick up again on the subject which Jesse Schell brought up at his DICE talk. Employees who generated the most sales within a month or reached certain (company) goals, received a price or a premium. Frequent-flyer programs use level systems where you go up the ranks through collecting points – from normal to premium or executive flyer. »Weight Watchers«, on the other hand, uses the participants' teamwork to share information and success stories with one another.

Level 2.3: Why Gamify? Gamification Put Into Practice

Gamification is a process of acquiring game design principles and popular mechanics as well as elements from the world of games and the transmission to non-gaming contexts. There are already a lot of examples where the use or the popularity of a product or a company could be increased significantly through successful gamification.
One of these popular examples is »Foursquare«, a location-based recommendation service app for restaurants and other institutions. Additionally, users can make social check-ins in these locations to collect points and awards, through which they can move up in a ranking system. Those who check in most often have the chance to become mayor of one of the locations. An additional app called »Swarm« lets users also connect with their friends to see where they check in. In this case, gamification is used to collect data and user experiences. The provider already benefits from more than 20 million members who voluntarily share their private data. The user on the other hand has access to a comprehensive



The recommendation app »Foursquare« allows check-ins to special locations, through which users can again earn points, bonuses and badges and move up in a ranking system.

»Zombies, Run!« places the users in a post-apocalyptic world and tells them when it's time to run for their lives.

location data base with rating systems similar to »Yelp« or »TripAdvisor«.

Gamification As A Marketing Tool

Gamification is already used by brands to appeal to the curiosity and motivation of their customers. Some brands create advanced apps which include a practical application of their products. Sweets manufacturer M&M's, for example, used the gamification approach to introduce a new product range in an innovative and game-like way. A simple graphic showed the established M&Ms sweets, with the new product hidden among them in the shape of a small pretzel – the task was to spot the pretzel. This comparatively easy and inexpensive idea helped M&M's to increase the awareness for the company and especially for the new product. The company's Facebook page registered over 25,000 new likes, more than 6,000 shares and over 10,000 comments.

»Nike+«, on the other hand, is one of the most popular gamification applications which appeals to a lot of potential customers with its product. It's a sneaker with an integrated tracker which tracks the walking or run paths and displays them in an app which records all activities and turns them into points. This motivates the users to repeat and to master tasks with increasing eagerness and to compete with each other during their daily training. Reaching certain levels unlocks trophies and awards, through which Nike increased motivation to share results on social media even more, which again benefitted the visibility of the brand. The gamified feedback of the sports activities led to more than 5,000,000 new users! Through this viral gamification process, Nike strengthened customer loyalty, and at the same time was able to collect a lot of data over a long period of time. The information gathered thus increased the productivity of the R&D and online departments.

Nike+ was so successful that other providers, too, used this idea for their business purposes. An entertaining example is »Zombies, Run!« – a game where you have to escape from carnivorous zombies instead of competing with friends. The game combines the core principles of Nike+ with story-telling. The users are inserted in a zombie-infested world and are told by a narrator whether it's time to run for their lives because an army of zombies is breathing down their necks.

The Game Of Disclosing Data

»Twitter« uses the Gamification aspect in a different way. If you create a new account, you are prompted to follow at least three other persons from a selection of ten other Twitter users – while being explained how »following« works. You can see the selection of those you are following and who is actually registered with Twitter. The personal feed then consists of tweets of the selected accounts. The users immediately experience the consequences of their actions, and the actions lead to a positive feedback which is a very important factor of gamification. Every action needs to deliver feedback, whereby negative feedback is to be avoided. The feedback should also be communicated transparently, meaning: How many points do I get for this action? What happens if I click here? How far away am I from the next rank? What does it take for me to level up?

The business platform »Linkedin« does it in a similar way. While creating your profile, a graph shows how many percent of the profile you have completed or how much information you have already provided and the according strength of your profile. Similar to Twitter, »Autodesk« uses interesting gamification mechanics to bind users to their product. The goal of their product range was to increase the use of

»Treehouse« offers online web design and coding classes. Depending on the expertise they gained, students can earn special badges which can also be seen by potential customers.

software during the test phase and thus the likelihood of a purchase. How is this goal implemented? Users can download the free test version of »Autodesk 3DS Max«, collect points by completing missions, move up in a ranking system and earn awards. On the one hand, the users learn how the tool works in a gamified way; on the other hand, they have the opportunity to win real prices like the full program license. This process helped Autodesk to increase the use of the test version to 54 percent, the conversion rate was 15 percent, and sales increased by 29 percent.

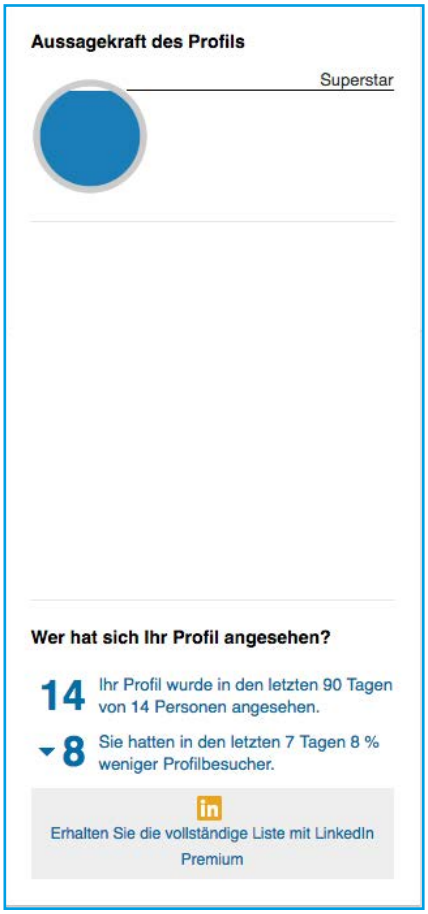
Questionable App

Even the American military has discovered the gamification model and used it for its own purposes. They ordered the development of a computer game called »America's Army« (americasarmy.com). The first-person shooter is to provide a graphic image of how the use of weapons on duty would look like in reality. America's Army is free; the players register with their real data. In the game, they collect badges and accolades, just like in the real military service. The actual recruitment website of the American Armed Forces looks very similar though, the structure is even almost identical to the game website. With a free game, new players are systematically introduced to military structures, and, worst case, join the US Army – maybe even without noticing.
Additionally, the army is constantly looking for technically versed young people with quick reflexes. Sometimes, the recruitment agents even approach top gamers directly. So, the American Army uses gamification almost in a fraudulent way by trespassing the boundary to the so-called »dark pattern«.

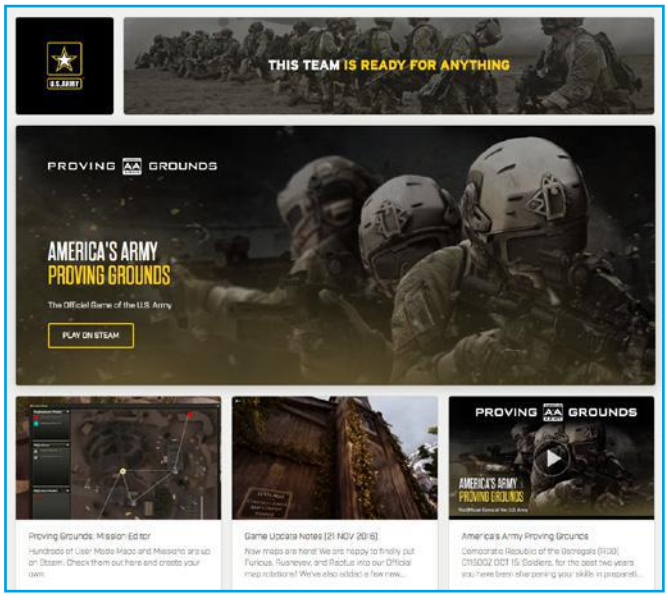
»eLearning«, too, makes use of gamification methods to bind and motivate their users even more. eLearning is becoming increasingly popular in trainings and other forms of knowledge building. Together, the five biggest open eLearning platforms already have more than 15 million registered users. eLearning classes are characterized particularly by the great freedom for their users who can choose what they're interested in, when they study, where they study, and how fast they study. Businesses, too, have started to recognize the potential of eLearning a while ago and implement it more and more through concrete offers.
One example for such online classes which are based on gamification methods can be found on TeamTreehouse.com. »Treehouse« offers classes in web design and coding, where participants can collect badges which serve as indicators for achieved successes and acquired expertise. These badges can be seen by other users, and even recruiters of bigger companies are eager to view this kind of information.

Level 3: The Future:

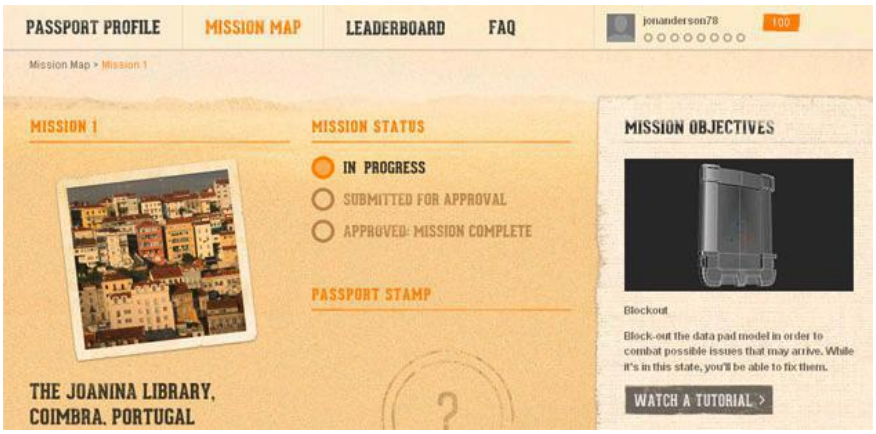
Just like Jesse Schell predicted almost seven years ago, some methods and elements taken from the gaming world have already found their way into our everyday lives or products which we come across on a daily basis. Companies which want to successfully use gamification as a business model have to be ready for it and accordingly be open for something new. Their product and tonality have to be suitable for it. And besides the technical perspective, it's essential to identify the needs of the employees or the project, to know their preferences with regard to gamification, and to take the company culture into account.
There is no »one size fits all« solution.


Aussagekraft des Profils
Superstar
Wer hat sich Ihr Profil angesehen?
14
Ihr Profil wurde in den letzten 90 Tagen von 14 Personen angesehen.
8
Sie hatten in den letzten 7 Tagen 8 % weniger Profilbesucher.
Erhalten Sie die vollständige Liste mit LinkedIn Premium

More information for higher efficiency: Those who want to »scoop the market« on LinkedIn, just have to thoroughly maintain their profile.



A negative connotation: The website of the US-Army shooter »America's Army« looks almost identical to the actual recruitment page.



Play your way to the full version: The test version of »Autodesk 3DS Max« not only introduced potential customers to the functions of the program through playing; they even had the chance to win a full version.

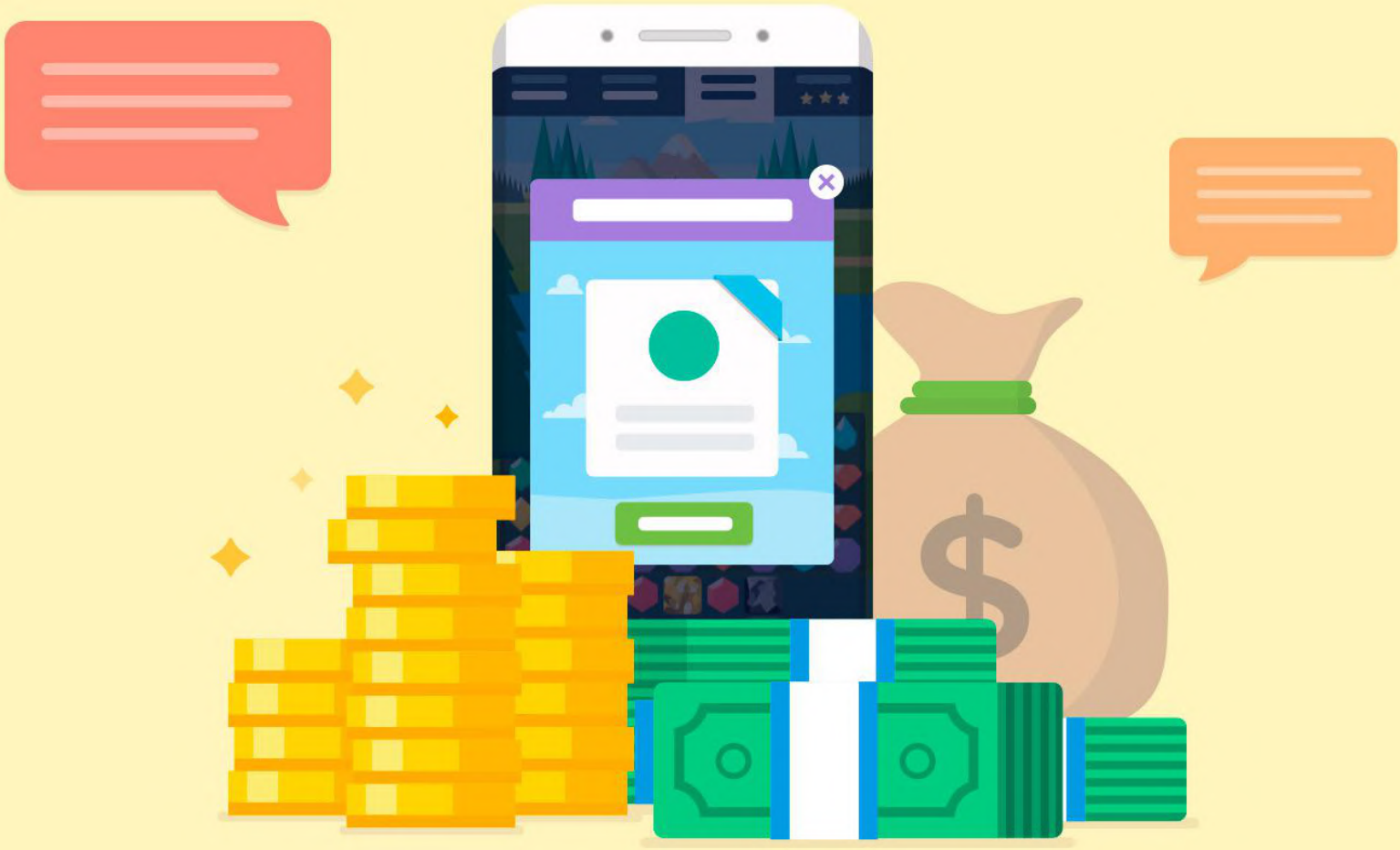
Everyone has different preferences and reacts differently to various incentives. Wrong incentives should be avoided and considered though when defining a gamification concept. If a person is rewarded points for posting in social media, this may quickly lead to the person producing a high number, but not necessarily useful or high-quality posts. It should be avoided that gamification elements gain too much importance and thus repress the internal motivation at work. What's also important is to check at the end of each project if the set goals like higher user numbers, user frequency or quality level have been reached, for example, by tracking data or interviewing participants.

The question how added values resulting from gamification can be precisely measured is still largely unanswered. For one part, there is a lack of tangible examples, but often companies also lack the required resources. And yet, it's abundantly clear that gamification has a significant potential for being used in said areas and that it can contribute to increasing satisfaction and productivity. Gamification requires a solid conception and knowledge of game design, psychology, computer science, education science and economic aspects.

Interested?

If you got interested in the topic of gamification, be it professionally or privately, and you would like to delve deeper into the subject, you start at the right time. The initial enthusiasm about gamification may have faded a bit, but it still exists. We're currently in a phase where we can find out how gamification works and the effects it can have. Its potential is enormous, as are the possibilities to further explore this subject. Feedback is therefore extremely important, and I would be very happy if you could let me know yours at mail@creative-pixels.net.

Marc Sodermanns



WHY STRONG MONETISATION FAVOURS THE BRAVE

With only 30 percent of mobile Free-to-Play games making $1 per daily active user, deltaDNA's Mark Robinson discusses why developers need to start taking monetisation more seriously.

With mobile games contributing $41m of the total $90m generated by the games industry last year, you'd think that mobile game developers had monetisation well and truly locked down. However, Free-to-Play (F2P) games is a granite tough business where effectively balancing the player experience with the need to integrate ads and in-app purchases (IAP) is a daily struggle. As a result, the majority of F2P games aren't profitable, with only 30 percent hitting the 10c Average Revenue Per Daily Active Users (ARPDAU), or $1 Lifetime Value (LTV) required to make money. While the reasons for an unprofitable game can be manifold, most developers tend to be obsessed with player retention and are therefore overly cautious or generous when it comes to ads and IAPs. While this might be good for the player, it makes no sense commercially, especially when you consider that only around two percent of F2P players ever monetise through IAPs.

Leaving cash on the table

Developers love making great games. It's why they became game developers. Therefore, it's no surprise that they are

Mark Robinson is CEO of deltaDNA.

Mark has over 15 years experience in data mining, working with companies including Heineken, Office Depot and Unibet. Fascinated by the potential of big data, Mark has made it his personal mission to evangelize on how analytics can change the fortunes of games and apps by delivering player insight and personalizing game experiences. @deltaDNA

PLATFORM	KPI	NO ADS	INTERSTITIALS	REWARDED
	D1	31%	44%	39%
	D7	9%	16%	14%
	D30	3%	5%	5%
	ARPDAU	$0.08	$0.03	$0.05
	DAILY %CVR	0.9%	0.5%	0.7%
	D1	33%	40%	39%
	D7	11%	15%	16%
	D30	4%	6%	8%
	ARPDAU	$0.18	$0.04	$0.09
	DAILY %CVR	1.2%	0.5%	0.8%

The table above shows how games with no ads can perform much better than games which serve poorly placed or irrelevant ads.

conflicted when it comes to filling their cherished creations with ads and monetisation mechanics. The problem is that few developers have the technology to be able to analyse how ad frequency and IAP pricing impacts the player experience. Without this knowledge, they let fear take over and adopt an ultra-cautious approach, but are these fears justified?

Let's start with ads. We know from our In-Game Advertising Study that developers see ads as a necessary evil, yet more than half (52 percent) feel unsure whether they are adopting the right ad strategy for their highest monetising F2P game, while only 3 percent describe their approach to advertising as 'effective'. We know that 98 percent of players won't spend on IAPs. It's also common for between 40 and 50 percent of players to leave a game after just one session. Yet many developers still only serve one ad or less per session, which is a reason why ad revenue only accounted for 35 percent of total game revenue last year.

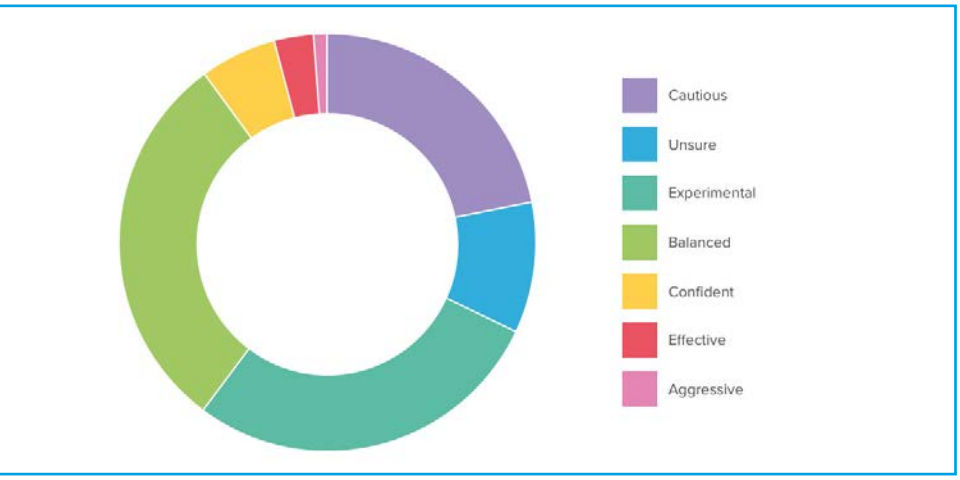
»The problem is that few developers have the technology to be able to analyse how ad frequency and IAP pricing impacts the player experience.«

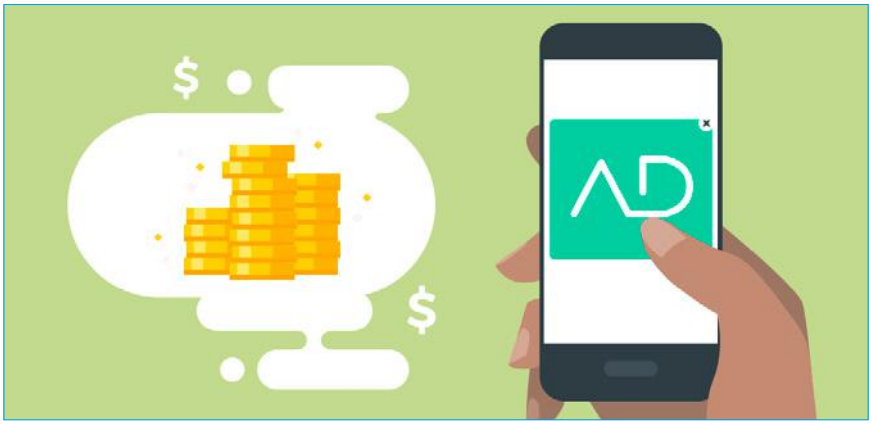
By not adopting a more aggressive ad frequency developers are just leaving a vast amount of potential revenue on the table. It's understandable to a point. Positive reviews are hugely important when it comes to driving downloads and if a player has a bad experience then they're likely to tell the world. But does ad frequency actually impact retention? Or is poor placement and targeting of ads more damaging?

This was the focus of a study by the University of San Francisco last year, which used anonymised data from the deltaDNA platform, to examine the relationship between ad frequency and retention. The study discovered that there was no evidence of first session ad density affecting retention, with Nick Ross, Assistant Professor, University of San Francisco stating, »there is no evidence to suggest that the density of ads, shown by a game in the first session, affects whether a player returns for a second session.«

In fact, the deltaDNA Insight Team took a look at a sample of platform data to

In deltaDNA's recent In-Game Advertising Study, publishers and developers were asked to select the one word which best described their approach to ads.





Academic studies have found no link between increased ad frequency and retention, dispelling a widely held monetisation myth.

determine the effectiveness of advertising on a game's ability to monetise. As can be seen below, if ads aren't properly measured and applied, they run the risk of cannibalising IAP expenditure and conversion.

Making IAP work

As with ads, developers are also cautious about IAP pricing, yet within a game, there is a very inelastic relationship between price and demand. It's obvious when you think about it, each game is a monopoly, there's no competition, so games that charge twice as much, tend to make roughly twice as much money. The minimum price point used by games that are successful, with 10c+ ARPDAU is $2.

Games can in fact be too generous. You need a D7 retention rate of at least 10 percent, with 10 percent of these players being payers. If you are failing to meet these metrics, then it could be that you are giving too much away for free.

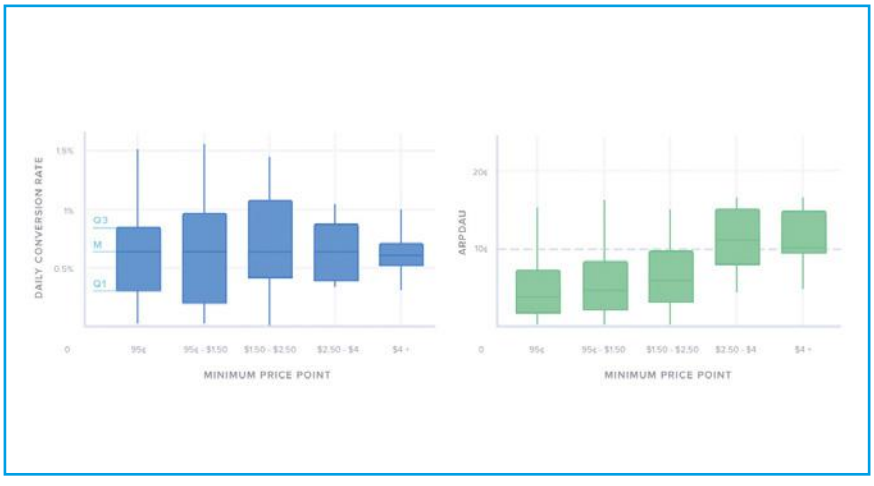
Unsuccessful games don't have enough repeat spending. When fewer than 2 percent of all players spend any money, it can become the all-consuming focus to get them to spend something, anything, but successful games develop a spending cycle within the game loop. Games that achieve 10c+ ARPDAU have an average of at least three spends per paying player, and preferably more.

You also need to have a minimum of 5 percent of spenders being Whales. Whales are defined as players who pay more than $100/month. Only 16 percent of games achieve all these measures.

Caution doesn't pay the bills

The big monetisation problem developers still face is their inability to analyse how different elements of monetisation impact the player experience. The natural tendency is to be cautious and overly generous. But the harsh reality is that caution and generosity doesn't pay the bills. You can often have sub-standard monetization in a good game, but you can't have successful monetization in a sub-standard game, so if your retention KPIs are strong you can afford to take an assertive approach with your monetization.

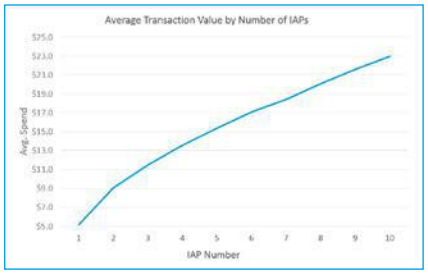
Mark Robinson



Thus chart shows that conversion does not decrease if the minimum price point is increased, the ARPDAU actually increases dramatically, yet price points lower than $2 devalues games significantly.

The value of players who spend more than once

Encouraging players to spend multiple times is important as the average transaction value increases with each IAP.



For mobile games on deltaDNA, the first transaction is worth $5.20 on average. This increases to $9.10 for the second and continues to increase all the way to $23 for the tenth transaction.

»By not adopting a more aggressive ad frequency developers are just leaving a vast amount of potential revenue on the table.«

BUILDING A LEAN TEAM

A functioning team is the essential foundation of success, but building such a team can be hard. Guido Schmidt from Digamore took the time to share some valuable advice that might help you in doing so.

Digamore is a start-up with currently ten people working on the mobile F2P game »Football Empire«, a genre-mix of building-up strategy and a football manager game.

Myself, I have been in the industry for over 15 years now and I have seen my fair share of projects, teams, deadlines and tough decisions. Starting out as a programmer I transitioned to game design relatively quickly, since I had a knack for knowing what was fun in a game and what wasn't. Working on the »ANNO« and »The Settlers« franchise I eventually moved to a lead position, guiding and managing teams in various projects.

The premise of Football Empire was a unique opportunity. When I joined the company, I was the first guy on the team. We had a rough idea of what we wanted to do and basically nothing else. Everything, from deciding which technology to use, which people to hire and what features to put into the game was pretty much open. A blank slate, if you will, which is good on one side but problematic on the other, because working without constraints and requirements will always lead to something the stakeholders do not want.

One of the first things we did was to scan the market for our potential competitors and determine how we can attack them. How we did this exactly and how this influenced the design decisions, however, is a story for another time. What we're focusing on today is how we planned to set up our team, the sort of working process we implemented and how we fostered a team culture of respect, ownership and motivation.

Our Goals

What are the goals when hiring a team? Well, obviously, there are things that every manager and CEO wants from a team. Things like:

- a fast team
- a team that is efficiently using its resources
- a team that produces high-quality code
- a self-organizing team
- a self-improving team
- a highly motivated team
- a team with passion
- and – finally – a team which delivers on time and budget

Which is fine, as all these things are good and correct and you should strive to create teams which achieve exactly these goals. There are, however, more things you need to consider. Things you learn when you are working in the industry for more than just a couple of years. All of these things are equally if not more important than the standard goals.

On the other hand, things you do NOT want to have in your team are ...

- ... a shadow hierarchy where you have an »official« way of taking decisions in your project while, in the end the guys with the most dominant personality (or skilled manipulators) de-facto take the real decisions. For example, when producers are taking design decisions instead of trusting their design specialists. Or when artists impose requirements on the engine, which lead to heavy performance issues.
- ... hidden efforts – when the planned tasks in your project plan do not reflect all the things that actually need to be done. Programmers, for example, having to set up their workstations, their toolchain or build-servers. Or artists having to conduct a lot of interviews for hiring more artists. There are a lot of things that do not find their way into the project plan and thus give a false impression on how fast the team can perform.
- ... unclear responsibilities – when it is unclear who has the last say in specific subject matters. Will the implementation of a new animation system be decided by the Lead Engine Coder, the Lead Animator or the Creative Director? During development, there a lot of tough decisions and calls to make, and it is not always clear who has to make the final call.
- ... responsibilities without power – when people are given areas of responsibility but not the power to actually make the necessary decisions. For example, putting an animator in charge of the quality of animations in your game without allowing him to make any calls on the implementation quality from a coding side, it might result in him having to use gimped tools and therefore a shabby implementation.
- ... a lack of transparency – hiding information from the team, not discussing uncomfortable issues and generally keeping the team on a »need to know« basis. For example, never showing your team the current state of a project in relation to the deadline it has. Or the artists having no idea what the game design team is currently working on, therefore not being able to intervene when a design decision is made that will cause the necessary effort on the artist's side to explode.

Given all that, we wanted to implement a very clear and easy-to-understand area of responsibility combined with a very transparent and efficient work process.

Who is this article for?

1. People who are interested in joining the gaming industry and want to check out how teams should work together.
2. Department leads who want to improve their management and leadership skills.
3. CEOs who want to improve the performance of their teams.

What are the key takeaways?

- How to motivate your team
- How to foster ownership in your team
- Improvements you can implement into your own way of leading a team
- The biggest advantage of SCRUM (which is not even SCRUM-specific)
- Why use "story points" and not a standard time estimation

Guido Schmidt
Project Lead at
Digamore Entertainment GmbH

Guido is an industry veteran with more than 15 years of experience. He worked on the »Anno« and »The Settlers« franchise (e.g. »Anno 1404« and »The Settlers Online«) and is now responsible for the upcoming Football Empire.

www.LinkedIn.com/in/narkers

Digamore's upcoming title »Football Empire« combines building-up strategy with »Football Manager« gameplay.

How to achieve that

So now that we know what we want, how do we achieve it? This should be pretty straightforward, right? We hire the people, write up our goals and show them to the team and tell them the following:

You guys need to ...
- ... be very fast and efficient!
- ... produce high quality code!
- ... be self-organizing and self-improving!
- ... be highly motivated and have passion for game development!
- ... get »on board«!
- and ultimately: you guys have to trust each other in order to provide a stellar performance

I have seen this happening over and over again ... but human beings just don't work that way. You can't simply order your team members to trust each other. Trust needs to grow and people need to experience first-hand that they can rely on the other person. They need to see for themselves that plans is predicted correctly. And people need to understand the benefit they have from producing, management and the work process they are using.

Only if people have been working together for some time and have gone through one or two hardships, trust begins to grow. And only if the managers and team members are really reliable and putting effort into fostering this kind of trust.
In any other case the team will start to develop barriers between departments and even between specific team members. This will then result in a broken communication flow, since people don't talk to people they don't trust and don't like. When you have a team where information does not flow easily and freely, it's a very big indicator that there is a huge underlying problem.

»You can't simply order your team members to trust each other!«

What did we plan to do?

In the beginning, we spent a lot of time thinking about how to set up our work process and environment so that the guys we were going to hire could prosper in. We then defined four points which were of special importance to us:

1. **Game Vision**
   Everyone on our team should understand what kind of game we are making.
2. **Team culture**
   Everyone should contribute to a positive and constructive atmosphere.
3. **Clear responsibilities**
   Everyone needs to understand who is responsible for which part of the project.
4. **Improving the work process**
   Everyone should be able to put forward improvements to the work process.

Game Vision

Having a clear and well elaborated vision of your game is key to a lot of things, for example:
- defining your unique selling proposition
- prioritizing your work
- avoiding feature-creep during the development process
- getting the team to understand what kind of game they are working on
- getting the marketing department to understand how they can sell the game

I made it a personal requirement to ensure that every team member could explain the vision of the game at any time. Even if I called them at 3am in the morning, they would have to be able to tell me what kind

of game we are making (not that I did such a thing, but you get the idea).

This included a welcome meeting with every new team member where I showed and explained the vision and the rationale behind our major design decisions. Also, in irregular intervals, we showed the team a project status update to visualize where we were in the bigger context and where the journey was going. And every time a major design decision had been taken, one of the key components was always to keep the whole team informed by creating an according presentation, plus rounds for asking questions and discussions. It takes a lot of time and effort to keep everyone informed, but the benefits are well worth the time. Just to name a few:

- People develop a better understanding of the status and outlook of the project.
- People gain confidence when they can see what has actually been achieved so far.
- Seeing the current state and the outlook fosters ambition within the team – even leading to voluntary overtime and higher motivation!
- People can better comprehend and see the reasons behind hard design decisions (for example, if some features need to be cut).
- People will identify themselves better with the project, if they understand what they are working on.
- People can forward ideas the management might not have considered before.

We didn't, however, even stop there. Just having a game vision is not enough. You want to base all your design tasks on the actual sentences of the vision statement. That way, every sentence really matters – we structured it like this:

- **Every "task" is part of a "user story".**
- **Every "user story" is part of an "EPIC".**
- **Every "EPIC" is part of a "sentence of the vision statement".**

Building Menu Design
Building Menu UI Concept
Building Asset Creation
As a player I can place a building on the club grounds
Building Menu Implementation
Place Building Functionality
Building Cost Balancing
These go to the board

Having a physical representation of all tasks boosts a sense of achievement.

Every single sentence in your vision statement has tangible effects on your project. Plus, you can trace every task back to the game vision, ensuring that every task is within your framework plan. It also helps to understand what it means to make changes to the vision. You can easily see all the repercussions such a decision has on a project.

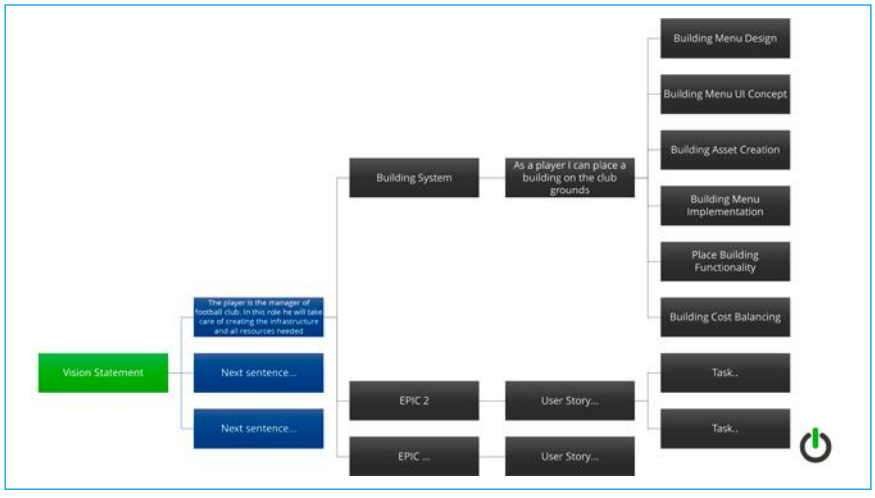
Pushing this structure further, we then put these user stories into »JIRA« (note: JIRA is a proprietary issue tracking product, developed by Atlassian. It provides bug tracking, issue tracking, and project management functions). Ultimately, when discussing the status and plan for the day in the daily stand-up meeting, tasks and stories have a real relevance and show the state of stories in context of the whole project.

This ensures that everyone understands how the current task someone working on is related to the rest of the project. People can then quickly sum up what they are working on, so that the rest of the team can spot any implications this task may have on their own work, clarify any new dependencies or other problems and discuss and solve them right after the meeting.

Team Culture

Having our vision in place was a good start. Next, we had to ensure a positive and constructive team culture. We needed to make

»Trust only begins to grow if people have been working together for some time and have gone through one or two hardships.«



The project's task structure that derived from the game vision.

it an accordingly relevant topic in the first place, so we defined it as »important!«.

We told all the guys that we wanted to have a good team culture and that we were going to put a strong emphasis on it. Basically, we defined a positive team culture as the basis for all the rest. Without a good foundation, no work process, no planning, no management and no organization will be sustainable in the long run. We set up guidelines on what we expected and how we wanted to treat each other, e.g. during discussions. Basic rules like:

- Everyone is respecting the other person(s).
- We do not interrupt each other when discussing.
- We keep discussions on an objective level, not an emotional one.
- We listen actively.
- We do not impose.
- We accept calls from people responsible for their subject matter.
- We stop discussing if these rules are violated, and everyone calms down before we are going to continue.

As we communicated these guidelines, everyone agreed that having and emphasising these points is a good thing. Additionally, I implemented monthly employee talks. I basically reserved 30 minutes of my time every month for every team member. I would invite them into a meeting room – just the two of us – and ask them two questions:

1. How are you?
2. Is there anything important you have on your mind right now?

The rationale behind these meetings was to provide a platform for everyone within the team to talk about issues, problems or anything they had on their plate – stuff which you are not talking about in public. I have often heard managers saying »Hey, my door is always open, you can come by whenever you want!« The problem here is, that people have to take the initiative. Often, they don't regard their problems as important enough to do so, other times they just can't get themselves to make the first step. Or maybe they feel like the offer is not meant seriously. Anyway, talks just don't happen in that kind of situation. That's why I invite and ask them myself. I provide an environment where they can tell me what bothers them. And I do this on an optional basis. People can tell me »Everything's fine, I'm super happy« and the meeting will be over in five minutes.

On the other hand, if there are serious issues, I will take as much time as is required to understand and solve these problems as soon and quickly as possible. Never leave them lingering – follow up and solve them. Then, and only then, will people realize that they can trust you and that things will improve when they talk to you.

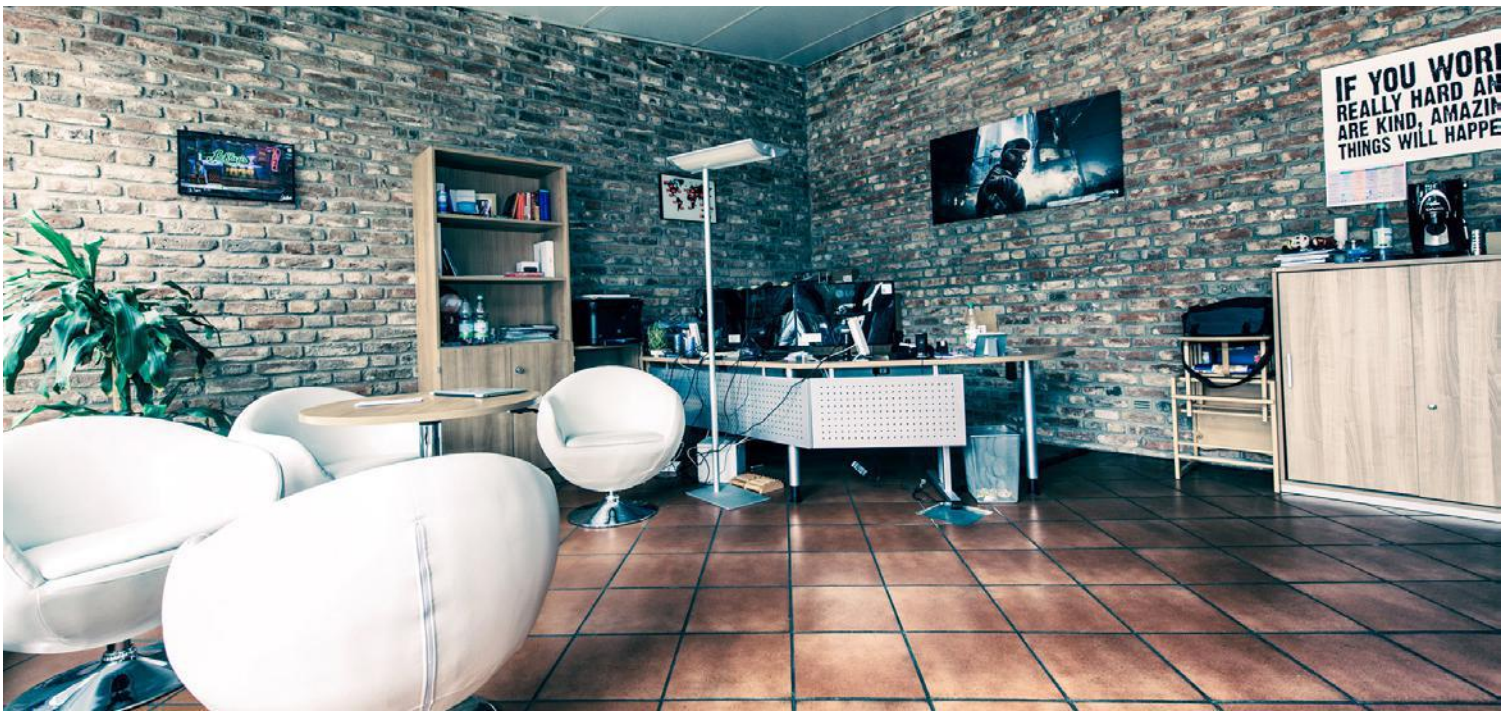
Eventually we also visualized our team culture – which is nice, but not necessary – like this (right page, top): »Team culture is something you have to live and breathe, and it must be supported from the top management. Within a company, team culture always flows from the top to the bottom.«

»Team culture is something you have to live and breathe, and it must be supported from the top management.«

Responsibilities

With having the two major pillars in place, we set out to elaborate all of the team's

Digamore settled in some modern office space right in the heart of Cologne.



Work process – Effective & transparent organization of collaboration
Working Climate – how we treat each other
Ownership – Everyone is responsible for his part

Visualization of the three pillars of a lean team: work climate, ownership and work processes.

responsibilities. The main motivation behind it was to create a safe environment for the team to grow their trust in. Like a scaffolding which would eventually become less and less important. We wanted crystal-clear structures in terms of responsibilities and privileges. What are all the tasks and areas of work we have in our project? Who is going to be responsible for the delivered quality? And when we make someone responsible for a certain area, we must also grant him the authority to actually take decisions.

So, we set up a big wiki page which detailed all the relevant areas of work. You can see some examples of it on the picture in the lower right. Additionally, we added detailed descriptions to some areas where we felt that just naming them is not enough to understand what exactly is expected. Once defined and worked out with the according members of the team, we presented the current state to the whole team and officially introduced all the people and their respective areas of responsibility. But it had to be a »living model«, because responsibilities can shift. When new people are hired or colleagues leave the company, new areas of work can be created or removed.

People should also be able to check on the structure of responsibilities and privileges easily and quickly. It was very important for us to be able to pinpoint whose decision it was in the end, when we were debating difficult calls during development.

Improving the work process

We set up the whole work process, team culture requirements and game vision structure in the best and most reasonable way we could. But of course, no plan survives reality unchanged. That's why we also put a lot of emphasis on observing and improving our work process. It wasn't enough to just set up and use SCRUM, we wanted the team to eventually own and shape the process on its own. For that we intentionally reserved two whole days per 2-week sprint. One day for planning and one day for reviews and retrospectives. Maybe it seemed like a huge waste of time initially, which was also the first feedback we got from the team. Why not use this time to pull off additional work? A good question that deserves a good answer.

First off, we know that implementing a new work process always requires a lot of time and effort. Everyone wants change but nobody wants to change. So we said that we intentionally invest this time into making this process work and that we are aware that it means we have less time to do actual work – and that's ok.

Second, we need this time to prepare our plan for the next sprint. We invest one whole day to make sure we can work for the remaining two weeks without having to re-adjust constantly. The main idea was to create two weeks of quiet, during which people can get stuff done without being constantly interrupted.

Third, we invest another day to reflect on how the last two weeks worked out. It is a timeframe that is short enough for people to not forget the problems they had. And by allowing ourselves the time to sit back one

Clearly defining all areas of responsibility for everyone helps the team immensely in growing trust.

A selection of user interfaces that were created for »Football Empire«.

day and reflect, we can make improvements to the way we work.

In a retrospective, people can bring forward topics they want to improve. The members of the team are the best people to ask this since they are the ones doing the actual work and having the actual problems. Of course, we also highlight things which went well. If you have to discuss uncomfortable issues, it is especially important to also be aware of the good things that happened within the last two weeks in order to avoid communicating an impression that things are worse than they really are. The most important part of the retrospective, however, are the real issues. The stuff that really annoys the team. Things that demotivate – things that cost an extraordinary amount of time, frustrating behavior of managers, unfair blaming of people and other uncomfortable circumstances.

However, by putting such a great emphasis on a positive and constructive team culture, we were always able to keep difficult discussions at an objective level. We were able to talk about things which annoyed us very calmly and we eventually resolved these problems by fostering understanding on all involved parties. Every team will have their share of issues, problems and personal annoyances. This is normal and every team will face these issues. The difference between a good and a bad team is how they deal with them.

At the end of each retrospective we put together a set of actions that we were going to try out to improve things. In the following retrospective, we then re-evaluated these actions to see whether they did improve anything. If they did, we kept them. If not, we dropped them and tried something else.

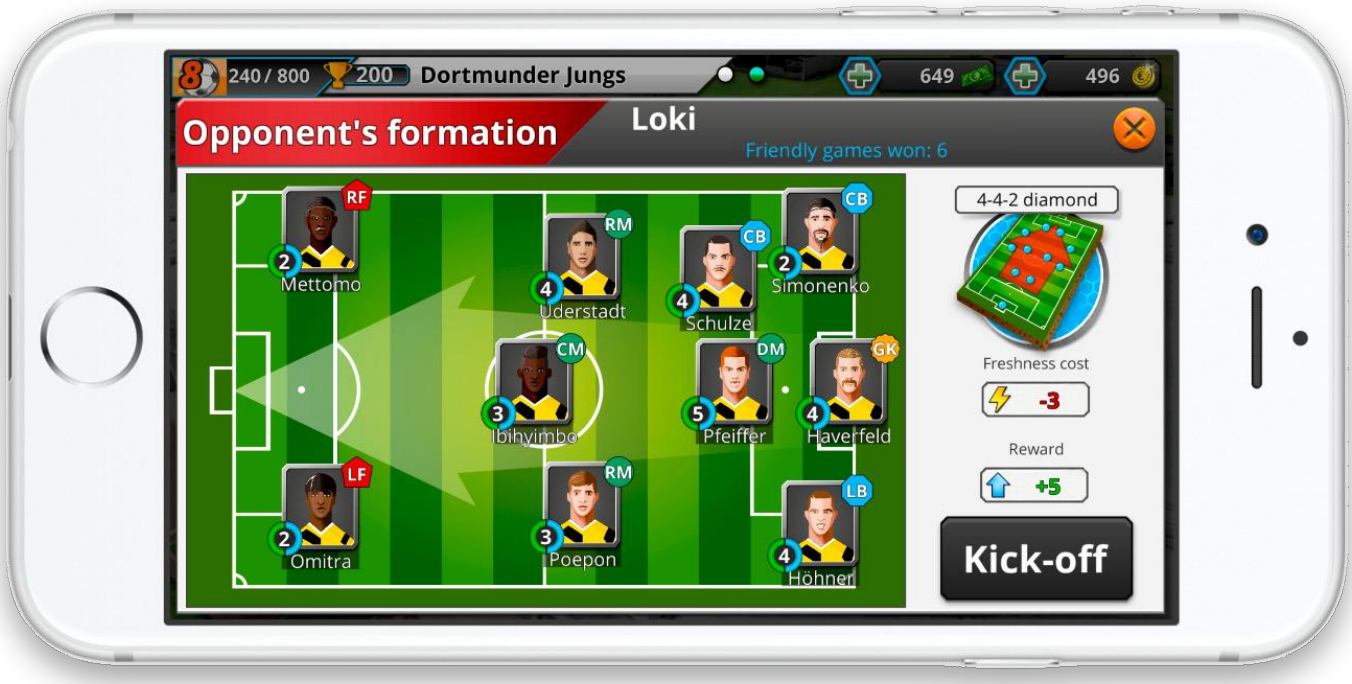
»Thanks to our mature discussion culture and ability to talk about uncomfortable topics we were able to greatly improve our work process.«

How did it work out?

Brace yourselves – winter is coming! And with it a lot of discussions about a lot of very very basic things. When we started working with SCRUM (note: an agile software development framework for managing product development) it was new to all of us. None of us had worked with SCRUM before, so we hired an external consulting company to help us implement it in our process correctly. These guys also helped us with understanding the meaning behind certain agile concepts, why they made sense and what it was that people benefited from. Some of the things we spent hours and hours talking about them:

1. What are the team's benefits from using SCRUM at all?
   - Isn't it a huge waste of time?
2. Why are we using »story points« and not just a time estimation just as »normal« people do?
   - And if we are using story points, what the hell is this »complexity«?
3. What's the exact granularity of our stories per feature?
   - Is it ok to just say »League User Interface« (like one story per feature)?
   - Should we make a story for each screen of the League Interface (four to five user stories)?
   - Or should we create a story for each interface element with all their behaviors and states (more like 30+ user stories)?
4. Aside from this, we also had fights and troubles concerning coding architecture, art-style or which features were still within the vision and which weren't. We had a huge scope on our plate and from time to time underestimated the effort it took to get certain features implemented, which led to fights about what features to push back and what should be achieved in certain milestones.

Basically, we went through all the insanity of game development you can expect in every company and project. Every team will face these problems. Accepting that teams will have these issues and knowing how to handle them is key. There is no perfect project out there, where everything runs smoothly from start to finish. Projects are messy. And projects change during development, as does the market and its requirements. People leave, new people join, but the world continues to turn. In today's fast paced society, it's even almost impossible to take reliable predictions two or three years into the future. Who can say what revolution is waiting around the corner, which will make your key USP totally worthless half way into your current project. And if it happens, do you continue with your original plan or would it be better to adjust?



An early draft of »Football Empire«'s »start a match screen«.

And if the answer is yes, how would you do that exactly?

Game development is full of tough questions and hard calls, which is also why the retrospective is the most important meeting in our whole development process in order to be able to adapt to the »unknown unknowns«. Thanks to our mature discussion culture and ability to talk about uncomfortable topics, we were able to greatly improve the efficiency of our work process.

When we started with planning meetings at the start of a sprint, they tended to last seven hours or longer. Those were extremely exhausting days, full of uncertainties, questions and unclear requirements of what we wanted to achieve over the next two weeks, but we stuck to it. During every retrospective, we not only identified the three worst problems, but also found ways to improve these long and exhausting meetings. We had to go a long way, but in doing so our meetings became very reliable and humane. It now rarely takes us more than 1.5 hours to complete our plan for the next 14 days. So yes, it is possible to improve the efficiency of your work process by up to 80 percent and more!

What are the team's benefits from using SCRUM at all?

Especially in the beginning of the production process, people were wondering why we would use SCRUM at all. How does the team benefit from it and why would we »waste« two (!) days every bi-weekly sprint sitting around and talking?

The very first step to get everyone on board was to acknowledge that it does take time to get a new work process implemented and that the management is willing to invest this time. It meant that we accepted that implementing new features would take longer in the first couple of months!
Just accepting and acknowledging this fact took a huge amount of pressure off us, since we made clear that we did not expect the team to implement a new and unknown process and push for a super-fast implementation of new things at the same time. When people are trying to adapt to new processes, it takes time to get everything in place properly. In addition, we spoke about the process and what we expected from it – for ourselves and for the team.

1. By using SCRUM, we ultimately expected a more accurate time estimation

- Measuring how many story points the team would be able to complete every two weeks would eventually allow a reliable forecast of how much work the team could pull off in reality, including all the disruptions, discussions, ambiguities and hidden efforts.

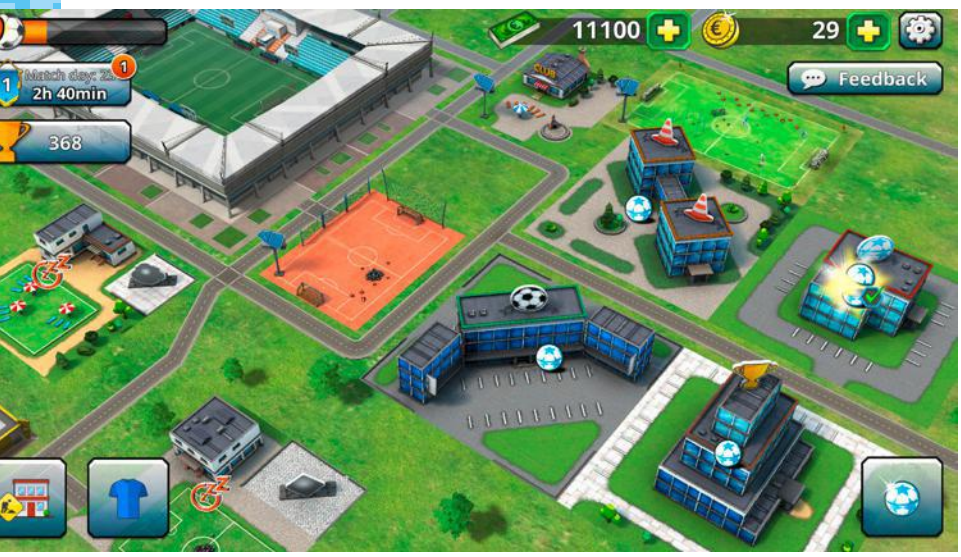
2. A more reliable project plan

- A more reliable plan meant better-quality planning. It was a lot easier to push estimated features back and forth and tell whether a feature would fit into the next milestone or not. Of course, we wanted to push as much stuff as possible into each new build, but when the numbers said that it was going to be a problem, we could adjust early enough to rather focus on the most important features.

3. Transparency

- We always made all efforts, plans and estimations publicly. We showed the current

»Football Empire« features numerous different types of items and buildings.



Players can individualize their club grounds with way more than 20 different buildings.

state to our team and discussed our plans and whether the team felt it was realistic or not. In several cases, we also changed the contents of certain milestones to what the team felt was more useful or easier to implement.

4. Less overtime

- More accurate planning will lead to more reasonable milestones which again will prevent nasty surprises. And avoiding those will prevent people from having to do overtime to get forgotten things into the next milestone.

Why are we using story points?

Estimating story points means to not just estimate »how long something takes to implement« but to determine the rough complexity of a given task. Of course, in the end, we want to re-interpret story points back to a time estimation – that's the whole point of it. Doing it via story points will in fact improve the quality of the time estimation. Let's say two programmers are to estimate how long a specific task will take them to implement. Programmer Lenny says he can do it in one day, while Carl argues he would probably need around five days to do the same. In this case a time estimation with regard to the whole team is very inaccurate.

Both guys, however, can agree on a rough complexity rating for the task.
It's just that Lenny can do the same thing a lot faster than Carl. Nevertheless, Lenny can't do everything alone and Carl has other areas of expertise. What we want is an accurate estimation of what the whole team and not only individual members can achieve. When both guys agree on the complexity of a story, they can eventually agree on a reasonable amount of story points for the task at hand. Our definition of complexity includes the following aspects:

1. Amount of expected iterations

- This aspect applies for tasks that encompass a lot of quick iterations, e.g. on how a specific window should scroll. Should it snap at certain key elements? And with how much inertia should it scroll? In this case, it makes sense to just implement something, try it out, adjust it, try it out again, etc ...
- Tasks like this are more complex than tasks with clear and easy requirements.

2. Scope of the task

- The sheer scope of a task contributes to its complexity. If a task requires to touch all 200 items in the game manually, it is more complex than if it requires to just touch the last 10.

3. Communication effort

- If a task can be completed without having to bother the other departments, it is less complex than if it is a task where coders, designers and artists have to synchronize in order to finalize it.

4. Testing effort

- If a task uses randomization, it is more complex than if it doesn't. That applies to all tasks that need several test-runs before their implementation can be finished.

5. Amount of different technologies used

- Every technology used contributes to complexity. If a task is to just create an icon, it is less complex than the task of creating a user interface which not only uses icons, but also sounds and that has to function on an Android and an iOS device.

6.Dependencies

- The more dependencies, the higher a task's complexity. If a task only touches the frontend alone, it is less complex than if the backend has to provide specific data before the frontend can show it.

With all of these aspects elaborated, the team eventually settled on a magnitude of how many storypoints each task was worth. That allowed us to greatly improve the quality of our planning forecasts.

What's the granularity of our user stories?

We were experimenting with various granularities. We wrote stories which were very big in the beginning and almost encompassed whole features. This method brought several disadvantages with it since we could not always complete a whole feature in one sprint, which meant that these stories could also not be completed. After that we went into the opposite direction and created stories which were extremely small and detailed, even going so far as to have a story for each interface element. Which, on one side, was a good indicator for what had been achieved. On the other side, it created a lot of dependencies between stories, which made the whole point somewhat useless. Plus, the overhead on the management team exploded and it was very difficult to keep up with the team. In this scenario, people were implementing things faster than we could design and document them.

Eventually we settled in the middle. Stories were basically written »screen by screen«, while the interface elements were described on the according wiki page.

Summary

So, in the end and in my opinion, there are three main points you should adhere to when creating a good team and – as a direct result – a good product:

1. Ensure a good work climate.

- Make it a topic.
- Emphasize it.
- A good work climate and team culture is the basis of everything that comes after. Get it right from the beginning because otherwise there is no point in trying to build anything on top as nothing will work out properly.

2. Create a framework of clear responsibilities which your team can eventually outgrow.

- Provide a safe environment for people where everyone can voice their concerns and where it's clear who has which responsibilities and who has to make the call.
- Be rigid at the beginning.
- Be flexible when the team is ready for it.

3. Improve the process (the »retrospective« within the SCRUM process).

- Ensure that the management is behind this approach. There's no point in trying to improve things when the management is not willing to invest time into doing so.
- Regularly reflect about how everyone did and what the most pressing issues are.
- Don't try to fix everything at once. Take the three worst issues and fix those, then take the next three issues and so forth.
- Ensure that the time-frame between taking action and reviewing it is short enough. Otherwise people will forget what they have agreed upon.

Guido Schmidt

Working places at Digamore are positioned in a way that makes it easy for people to turn around and talk to each other.

At the end of the day, making games is what we love to do - and we have a great team to do so.

THE MoGi EXPERIENCE

YOUR SUCCESS IN 40 LANGUAGES

Gaming has become a worldwide sensation, with an ever-growing industry and new markets to be discovered and conquered. Localizing your game helps you do that – and MoGi-Group knows just how.

Tripwires's co-op shooter »Killing Floor 2« is one of MoGi's more recent projects.

Localizing a game today includes way more than just the translation of a couple of words and maybe some voice-overs. Grasping what you don't understand is hard. Getting rid of language barriers is one step to better immersing into today's virtual experiences – as well as entering and conquering new markets all over the world. MoGi-Group's teams of more than 200 members, stationed in Munich, Athens, Brussels and Dublin, have dedicated themselves to do exactly that: to not only localize games but to deliver the full »MoGi experience«. Orad Elkayam, CEO of MoGi-Group, will tell you exactly what that is.

Orad, thank you for your time. Would you be so kind as to introduce yourself to our readers and tell us what your company MoGi-Group stands for, what it's specialized in and what it offers?

My name is Orad Elkayam and I am the CEO and founder of MoGi-Group. Since 2009 the company specializes in providing services to the gaming industry, from localization to player support, testing, voice-over recordings, script writing and community management – and we love it! I've always been a gamer. For me to work in this industry is a dream come true, especially with partners whose games I grew up playing.

Your portfolio includes quite a solid selection of pretty huge names.

It does. And we pride ourselves very much on the way that we do things. It's hard for me to pinpoint the differences exactly because I don't know our competition intimately enough, but we do hear it from our clients that working with us, they get that »MoGi experience« that they didn't know existed. We have been maintaining a 98 percent client

retention for the last four years, which we are very proud of, and we're trying to continue to bring that positive impact into everything that we do.

Recently we launched our indie developer program, which is basically helping indie developers use our level of localization and services but at a very affordable price. It isn't for profit, it's more to give indie developers the opportunity to work with a high-class provider at a very comfortable rate and present their games to the international community in the highest quality possible. The response we've gotten so far has been tremendous, and the games we've worked on have been very interesting. Whenever I have time to play these games I'm always blown away, knowing it's not just »Assassin's Creed« or »Call of Duty«, there's so much other challenging stuff out there, and we are proud to be a part of that.

MoGi-Group is stationed in Athens, Munich, Brussels, Manchester and Dublin.

I would imagine being a gamer yourself and knowing what aspects to focus on gives you quite an important advantage when it comes to localizing video games.

It does! A lot of companies are writing »By gamers for gamers«. I really hate this tag-line because I don't think it's good enough. What we try to do is to find the professionals, the people with deep industry knowledge in localization, understanding of technology and tools, understanding of localization processes and of course high quality in delivery of language, and we want them to be passionate about games as well. Most of the guys that have come here or that are working on current projects, aren't gamers, meaning they are not people who have worked in the gaming industry and just translate games. We are all coming from the language industry, all with a very rich background in language and localization, but all of us share that same video game passion. We do a lot of other stuff as well, but we love the video games industry and being a part of it. I think that's very important and it creates that additional quality that we are able to provide because we are professionals. And, you know, being able to work on amazing titles that are being played by millions of people and contributing content to that has been – we aren't a small company, so I don't know how everybody feels, but at least as far as I know – a very rewarding experience for the whole team.

»To work in this industry is a dream come true, especially with partners whose games I grew up playing.«

Asking as someone who doesn't have any noteworthy experiene with localizing: How different is localizing a game compared to localizing a book, a movie or maybe a TV series, where you – simply put – start at the beginning and work your way through to the end? In a movie there's no danger of viewers getting stuck and not being able to proceed due to translation errors. In a game, of course, you also have to work your way through sometimes massive amounts of text, but in addition to that you have to be extraordinarily careful in detail. Translate a mission's objective the wrong way, and players get stuck and therefore angry. Choose the wrong word for an essential quest item, and players won't know what to do with it, might get stuck and – again – angry. The same goes for tooltips in RPGs or for similar components.

Long story short: Would you say localizing a game is not only (completely) different but also a lot more challenging than translating books or movies?

Well, I don't necessarily agree with the comparison. I think that every product that offers an immersive experience needs to be understood in order to be represented correctly in the foreign target language. Again, not to compare, just to talk about what we do and how we immerse ourselves in a product: We definitely believe that understanding the game, the target market and the message that the game wants to deliver, is so important – from the technical to the meta-physical aspects of the story, from the writer's intention and the purpose of the quests to the names of the NPCs, the names of the skills, and the names of the items. We do spend a lot of time getting to know the product by playing the game. Our teams immerse themselves within the content in order to not just resolve contextual issues that are very important, but also to deliver the additional element that I find sometimes missing when playing localized games. Both games and motion pictures are immersive experiences and you want to immerse the viewer or the player in it.

MoGi Group International

Overview: What MoGi offers

More than a mere provider – MoGi takes care of all your game's linguistic needs:

- Video Games Localization
- Casual Games Localization
- Online Gaming Localization
- Computer Game Localization
- MMO Localization
- Mobile Game Localization
- Games Community Management
- Video Game Customer Support
- Video Game Voice-Over Services
- Game Localization Testing

Without understanding the process and content, that's very difficult to do. But I do agree with you that the process is different when you are translating user guides, manuals or technical documentations. That immersive understanding of the product itself, what' it going to be used for and how, is still very important in order to translate everything accurately and correctly. You don't want people getting stuck with a user guide that they don't know how to use, right? All these things share a very common denominator: If you don't understand the product you are working on, you will have a hard time – be it as a translator, project manager or the company providing whatever kind of service, whether it's localization, testing or voice-over. It's crucial to immerse yourself in the script, understand the mood of a character, understand who is talking to whom and what's happening. Is he angry, sad or happy? Is it a humorous or a serious notion? Is he trying to be funny or is he just funny without trying? This immersion is important for every product we work on, from small mobile games to big immersive RPGs or MOBAs. All these different games have a very similar process of getting to know the product well enough so that you are able to meet a deadline, but also deliver that immersive experience to an international viewer or player. The process is actually very similar. Skipping it because you're thinking »Ah, it's not a real game« or »This game is too little to have that importance« is what in my opinion sometimes creates that difference in quality in terms of localization.

If you want to compare the practical side of translating a product like a game or a book: yes, there are differences. When you are, for example, translating a book, you do not have any space limitations. You can have all the pages that you want and need to express your creativity. When you translate a game, however, you need to remember specific limitations, compliance rules or – depending on the platform – a specific terminology. So, yes, on the practical side there are differences you need to take into account.

Different languages may need more space for the same amount of content, which can become a real hassle - like in »Forge of Empire«'s science trees.

Talking about space and maybe even UI-redesigns due to translated content – does, for example, translating into languages like Japanese or Mandarin confront you with additional hurdles, as these languages use a completely different set of letters?

You don't even have to take it that far. Just take German and English. The difference in space and how to convey the same meaning into a very limited space is always a challenge. A far greater hurdle is maintaining that consistency throughout each language, as you translate a game into Japanese, German, French, Italian, Spanish or Korean. You want to make sure that there aren't too many differences in terms of technical messaging. The story sometimes could be different or jokes could be changed, which is of course a very complex issue, especially when we are talking about games that are very culture-specific. Take a joke that is US-based, it's very likely German or Japanese audiences wouldn't understand it. Then sometimes we have to rewrite parts of this content to make sure that the humorous piece would still work in that particular language. Of course, we stray from the source and we work with our client to assure that they understand what we were trying to do and achieve. That way they can approve the piece of content that we are adding to the game to compensate for different cultural elements that just wouldn't translate well – pun intended. That applies to jokes, songs, and poems – no matter if they're in a book, a movie, or a game.

Take American slang, for example. It's so difficult to translate slang and make sure that a German, Dutch or Korean person would have that same feeling and say »Oh yeah, I get it, that's funny!« It definitely is a challenge. A very fun challenge though, because it gets all of the teams to think together. All of our language teams are working on a universal server, and they're translating together in real time. When they face these challenges, they tackle them together and try to find a balance between all the different languages, if possible. And if not, we start creating different elements for every language to make sure that this specific part will work for everyone. It's a lot of fun to be a part of those brainstorming sessions. I participated in a few of them, not as a contributing member, but just listening to and hearing all these different things they are taking into account, for example, how certain elements will affect the story going forward. A fascinating debate! Challenging projects are always a lot of fun.

So you have your different teams and whenever they stumble upon some puns or idioms that are really difficult to translate but crucial all the same, they all gather in a room to brainstorm collectively on these special cases?
The process is as follows: Whenever we get into a new game, our English writing team – if the source is English, of course – will go through the content very briskly to identify all the different challenges and hurdles that we could potentially encounter within the localization process. They will mark these passages as challenging points which will already prepare the different teams for what they are going to encounter: jokes, poems, cultural issues, puns, slang – any points that we can identify very quickly. So once we reach one of these points, everybody stops and we have a quick discussion to make sure that we are ready for this. Our English writing team is also assisting in this process to make sure that if we need to make changes to the source, maybe because the client wishes so, they are there to help or to clarify, for example, when words are misspelled on purpose because it's supposed to be funny – not to correct it or flag it as an issue, but flow with it. We have a very intricate process to deal with these sorts of challenges. And we enjoy them, as they're some kind of routine breakers and really make you think.

When exactly does the process of localizing a game start? When it's done and you get a finished script, or do you work alongside the developers right from the beginning?
Both, actually. It really depends on the stage the game is at or how much time we have. Sometimes we don't even get to play the game before the localization is done. We then have a patch round where we correct a lot of things that we couldn't understand contextually because we didn't get our hands on the early product. But it really depends on the product, the developer or the deadlines. We sit with every individual client to find the best process for their project and how we are going to handle it. How much time do we have until submission? Do we have time for patches? All these factors need to be evaluated before a project begins, so we know which way we are headed. Other times, however, we just get the script with loads of changes – that happens as well, even with very big companies and very big games. It's a matter of how we can merge internal localization processes with our own or adapt ours to said internal processes.

Out of experience though, the biggest efforts occur when the source is not written originally in English, so the client is doing translations from another language – some Asian language for example – into English. We get the raw material to start working on, while they also keep working on the English version and we get updated versions over and over, so we don't lose time. Well ... this is how we actually do lose time. But at the end it's up to the clients how they want to move and how much time they have at their disposal.

Looking back into the early days of gaming, in comparison to today's global industry, with countries like Russia, China and Korea on the rise – has there been a significant shift in terms of important languages? And what about the quality of localizations? Whenever I think about this topic, I automatically have to think of Konami's »Metal Gear Solid« for Sony's PlayStation. The localization quality was a real deal breaker back then.
That's actually a difficult question for me to answer, as we don't do marketing, publishing or research. From what we've seen since we entered the market as professionals in 2009, localization has evolved greatly from a quality standpoint! Gaming companies were thinking about fixed languages and important language combinations and they still do, but nowadays we also have Turkish, Polish, Portuguese or Russian. The number of games coming from North America to Europe and Asia is continuing to increase. Just look at Brazil. Brazil has been an upcoming market for the last five years and we noticed how the demand for Brazilian localizations has increased to a point that we already have our own internal teams that are working with us full time because we have such a high demand for these language combinations.

> »Immersion is important for every product we work on, from small mobile games to big immersive RPGs or MOBAs.«

In terms of importance, it's also hard to answer as there are so many factors and calculations playing into that. Some of those are connected to the platform, monetization, interaction with the product, Free-2-Play or not Free-2-Play – so many little things that motivate a publisher or developer to choose a language to localize into. And we honestly try to stay away from that discussion as it's simply not our core business. We provide the service, not necessarily the consultation. Meaning: If you ask me which languages you should translate into, I can give you an answer, but I would also tell you to take it with a grain of salt and consult professionals who understand these things far better and who can back their answers up with official numbers, facts and data, which we simply do not have. Our experience is limited in that area. We notice if a game is successful after it is released, but we don't know how successful it is in numbers or in which markets it did best. We're simply not exposed to that side of the business. We do get some of the numbers, especially when

Telltale's »The Walking Dead«, »Batman - A Telltale Series« or »Tales from the Borderlands« are just a selection of adventures MoGi has localized up until now.

Team17 's party classic »Worms« is as much fun today as it has always been - in every language!

we are working on the customer support side. Then we see where the support requirements are lower or higher, but these are merely assumptions that are not necessarily based on empirical facts. If you ask me how to localize a game or how to prepare a product for localization, I can give you a clear answer. Ask me about business development, marketing or where a game might be successful, I can only share my opinion. Asking me that question is a little like asking a baker how much bread you should buy. He would most likely say a lot if not all of it (laughs).

We definitely see a rise in requests for additional languages that weren't there five or ten years ago. It's very clear why that it is happening, the industry is changing. We were there at the beginning of mobile games, and we enjoyed the »online game bubble« as we called it back in the days. Now, consoles are back and they're pushing hard. The amount of competition is rising, the development costs are lowering. As a game localization company we translate over 45 million words of games per year into 23 languages as a constant. Apart from these, we have six or seven rare requests. And we can see how that shift has changed throughout the years – a decade ago we translated into only 16 languages. I think it's amazing to see how titles are getting global exposure these days, which wasn't possible back then. That's due to the platform development and the accessibility. Still, consoles for example, don't penetrate Turkey. Turkey is very strong in online and mobile games, it's enormously difficult to get consoles there. They've tried for a long time, but it doesn't work. It created an additional requirement for Turkish localizations because of the amount and the variety of platforms people can get, as well as gaming content that wasn't available there ten years ago. I think today's technology and the accessibility of gaming content is responsible for the vast increase of language combinations. It's fantastic to see that today we are able to communicate with so many different cultures and people with the same product and everybody gets enjoyment out of it. And that is due to these talented localization people that have been or are working on all of those projects. When you went to a gaming

MoGi builds on native-speaking language and linguistic experts - a passion for video games, however, is a must.

store maybe five or ten years ago, you saw the same publishers and games over and over again, and I remember thinking that this was so boring. Seeing the huge variety today and the rollercoaster ride that some of those publishers and developers are going through when they're releasing a game, not knowing if they will be a hit or not, is kind of thrilling, but also nerve-wrecking, and I am totally not envious of this process. From a consumer standpoint, however, it's absolutely amazing. Personally, I play on anything you can play on and my free time is completely dedicated to gaming. It doesn't matter whether it's on a console, the PC or on a phone. I also play a huge variety of games, but since we're in this industry, I usually play the games that we are working on – I have a special place in my heart for those. The amount of variety, accessibility and creative ideas that are coming out is amazing. When you only play big games, you feel like innovation is gone in the industry, but when you start delving deeper, you realize that it's not gone at all, it's actually unbelievable. Being even a little part that is enabling these innovative guys to reach out to more people is something that gives me great joy and makes me very, very proud.

Are there any languages that you think are empirical to offer, like English? And how about the number of different languages that you choose: quantity over quality? I would imagine there are more than enough developers who think the more languages the better, because apparently that way you find your way into a larger number of markets – without thinking about the consequences like patches and updates, for example. When you have your game localized into 40 languages, you have to do it again with every additional piece of content... it's kind of coming to bite you.

Again, a very difficult question to answer. I do not believe in »quantity over quality«. It simply doesn't work in localization – you still have to pay for all the languages you pick. And it's exactly as you said, even if it's not only about updates or patches. Start with the support: Creating a game and translating it into languages you can't support afterwards will create several issues in the future. Imagine you have your game localized into Vietnamese, but you don't support that language in the long run. So, whenever you get a ticket from Vietnamese players, the customer support doesn't get what it's about, may start to use Google translate or some trash like that, but still you won't be able to help out that customer adequately – they're going to get frustrated and at some point, it will backfire!

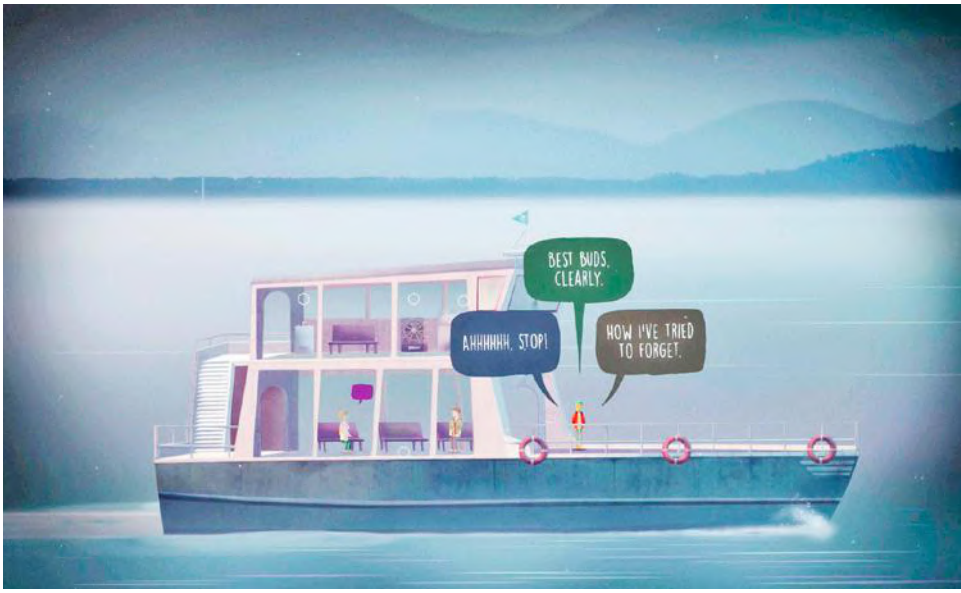
The decision on which languages you want to have needs to come from smart marketing, from someone who can tell you where your product is most likely going to be successful. You need to do it right, even if it's only five or six languages. »Doing it right« means to cover all the aspects that come with localization, whether it's updates, support or anything else that could be a factor in the success of the game. When you are new to the market, it's especially important to make a solid first impression, so you can build a fan-base that will most likely play your future games as well.

These decisions, however, are executive decisions. A localization company cannot be held responsible for knowing, understanding and providing this data, but we do try to share our points of view. If we feel that our partner is making a mistake or doing something we wouldn't, we do tell them, but in the end, they are the boss. We're always kind of fighting between our two hats, the consultant hat and our service provider hat. We put the consultant hat on and share our opinion. When it's being ignored, we switch to our service provider hat and say »Yes, Sir!« and do as instructed. It is a very delicate balance to keep sometimes.

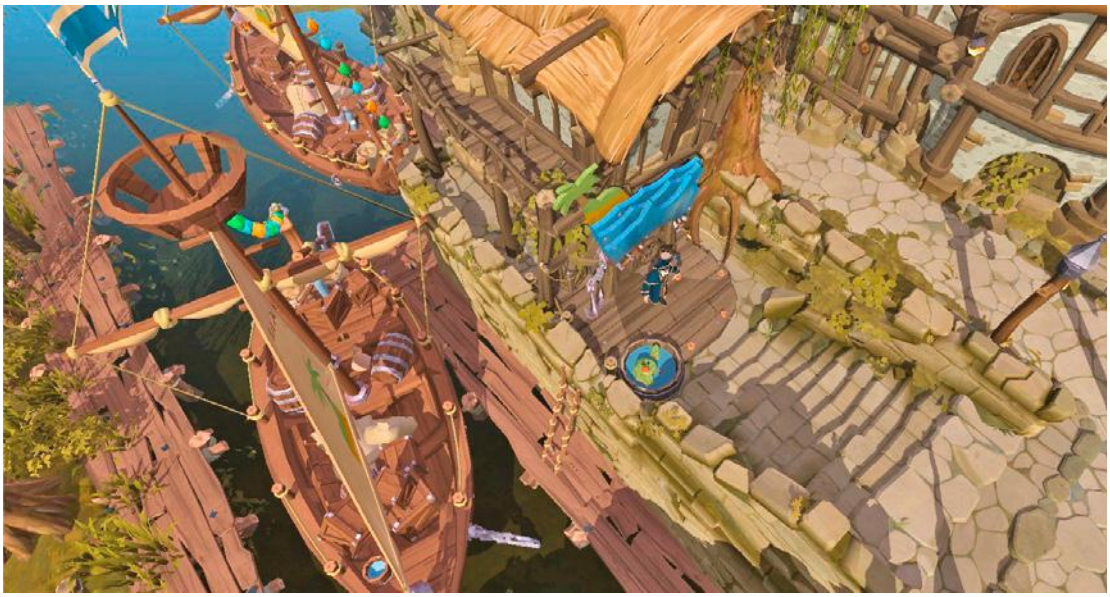
For our newcomers out there, let's talk numbers: What does a localization process cost or at least what are the factors the final price is based on? The amount of text? Voice-overs? Let's take an episode of a Telltale adventure as an example.

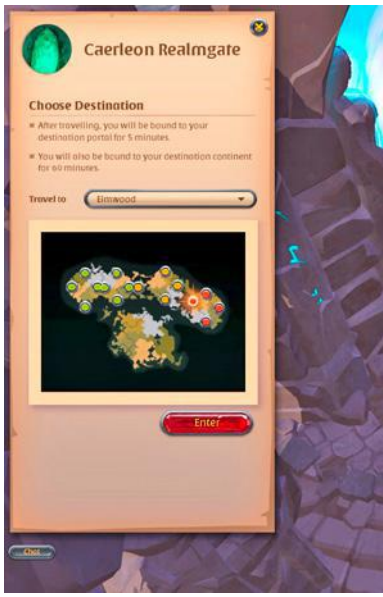
I can't really talk numbers here because we're under NDA. But as you already mentioned it depends on the amount of text. Also on deadlines – sometimes, not always. We don't apply rush-rates to our partners, but if something is very, very urgent and you need it done very quickly, there might be additional fees involved; very rarely, but it does happen. Then it depends on the language, of course. We have languages or language groups that differ in price.

»We're always kind of fighting between our two hats - the consultant hat and our service provider hat.«



Spooky: The indie adventure »Oxenfree« was localized after developer Night School published its teeny ghost story.





MMORPGs like »Albion Online« don't only include huge amounts of tooltips and thus text, they also require extensive community support.

Pixel-sidescroller »Axiom Verge« by Thomas Happ Games was blessed with amazing ratings - guess who localized it.

So translating a game into English is cheaper than, for example, into Japanese or Mandarin?
It rather depends on the source-language, from which we translate into English. In case of Asian languages there's another factor to consider: They are based on characters, not on words. When translating one European language into another European language, however, you are counting words.

There are a lot of aspects to be considered, but we try to simplify it for as much as possible and release our partners from PM-fees, rush-rates, minimum fees and all this weird stuff other companies do. We try to include everything within our word or character rates in order to give out a price that is simple to comprehend but includes all the services that we are providing. That includes our »Six Eye Concept«. Our industry always talks about four eyes (note: »The Four Eyes Principle« is a requirement that two individuals approve some action before it can be taken, also called »two-man rule« or »two-person rule«); we have six. Over the last four years we worked hard on making it easy for our clients to understand what we are pricing, how much it costs and to completely eliminate any strange or hidden fees.

Do you think some developers still underestimate the importance of localizations respectively overestimate the number of players that are satisfied with English and maybe just don't a buy a game because it's not available in their language? A lot of Russians, just as an example, continuously state that many developers underestimate the Eastern market. You can create an awesome game, but it won't sell if there's no Russian localization.
I tend to agree. I think that localization is regarded as a »by the way«-process, even some kind of luxury. Localization is still not connected directly to the success of a product, but it's something you need to think of from day one if you want your game to be localized properly and worked on well enough. In our industry we constantly encounter prices being pushed down and also a lack of respect towards the professionals and their work. The thing is: MoGi is a partner, not a provider – and I think that's what also differentiates us from other companies.

You definitely do seem to really like your job.
Wrong, I don't like it. I love it! And seriously, every day I get up I thank whoever's out there looking out for my fortune to be able to do this kind of thing. And, well ... it's difficult to put into words: Whenever I feel that I am more passionate about your product than you are, it seriously makes me not want to work with you. That's exactly how we do things here. We're a partner and there for you when you need us. Our clients come first on every aspect, whether you are the biggest client or the smallest, everybody gets the same service and the same level of attention. As soon as you start to think of us as just a provider, things start to go wrong. I don't want you to pay me some money for a service you don't care about – if it works, it works. If it doesn't, well ... it doesn't.

We want to become an integral part of your work and your success. We want to understand what you want to achieve, so we can help you achieve it. We provide so many things outside of localization like player support, voice-over, testing and script-writing. So many different aspects of what makes a product whole, so that partnering with us – aside from the fact that it gives you the flexibility of outsourcing everything or single components – gives you someone who has experience in all these areas. This is a partnership that you can leverage as well as that you can learn from and teach. We love to learn new things!

I do try to talk to all of our clients, often I'm unsuccessful though because we have too many, thank God. But I do try to talk to as many as I can because in every single conversation that I have I learn something new. It's a phenomenal experience to have these kinds of relationships and I think it's directly related to our client retention. We don't work with just anyone. If you ask me about our criteria, I wouldn't be able to tell you, it's something that I feel. And if we do not feel comfortable or just like another provider in long line of providers without any chemistry, it simply turns me off – that's it.

It's absolutely not about the money, it's about making awesome things. Our success is something I see as a by-product, as a derivative of our passion and not the other way around. We are passionate about what we do and about working with people who feel the same. And when we're in a room, the sparks are flying! It's an almost sexual experience (laughs).

»Our success is something I see as a byproduct of our passion, not the other way around.«

Our challenge is spreading this passion throughout more than 200 people. That's not easy, but it's my job. On the one hand my passion is somehow contagious, on the other hand we invest a lot in company culture and development in order to make sure that this passion trickles down from the CEO to the management, the senior management, the project managers and translators, whether they are in-house or outsourced. We really try to infuse every aspect of this company with this passion, otherwise it's not going to work. Otherwise there will be something missing, something in quality or some other area. When it comes to working with a passionate project manager or one without passion, the latter is unacceptable to me! You said before that our profession sounds stressful. Well ... hell yeah (laughs), but there's a lot of good and awesome things and moments that we all cherish. It's a double-edged sword, like in anything – there are good things and bad things, but overall being a part of this industry that we all love so much is such a privilege that all these good things just trump all the rest.

What requirements need to be fulfilled to have a chance on making a career at MoGi?

I apply the same standards to the staff at MoGi as I apply to myself – unfortunately I have very high standards for myself (laughs). Seriously though. When it comes to working at MoGi, as I said earlier on, there is one thing that is more important to me than anything else someone might have on a CV: passion. If someone is going to succeed in a career with MoGi, they have to be passionate; about gaming and about their work.

I couldn't say if there is a particular type of personality that makes a perfect candidate, everyone at MoGi is unique, but they must be able to keep up to speed in our fast-paced environment. When it comes to the gaming industry, especially when you're working with so many clients from all over the world – very often in different time zones – you need to be adaptable to your environment; always willing to learn something new or make yourself flexible to the needs of whatever project it is you're working on. Being pro-active is important, but I think when you love what you do that pro-active nature should sort of come naturally. We look for people who are self-motivated with an entrepreneurial spirit.

Another important aspect, it almost goes without saying, is the applicant's language skills. Language and linguistics are very much at the heart of what we do, so having an excellent grasp on language is so important. Important not only in providing an accurate localization in terms of technicality, but culturally, too. Using native-speaking translators often means that none of the little intricasies – jokes, poems, songs, etc. – within the game's dialogue get overlooked. This is extremely important, especially when it comes to story-driven games. Knowing gaming inside and out is important, but it's also important to me that everyone at MoGi loves what they do, and loving gaming is part of that. Being immersed in the world of gaming, the cultural references and the language of the community makes for a better localization and a better translator. That kind of knowledge is so important, but once an applicant has passion they will go a long way.

Interview: Nico Balletta

Localizing RPGs like NCSOFT's »Blade & Soul« can become quite expensive, which makes choosing the right languages even more important, especially when localizing from exotic languages like Korean.

THE INDUSTRY AT A GLANCE
COMPANY INDEX

Forget about the directory assistance! Here you will find all known publishers, developers, service providers, educational institutions and unions of the German speaking games industry.

Company	Street/Street Number	Postal Code	City	Phone number	E-mail
DEVELOPMENT					
3d-io	Albrechtstraße 46	65185	Wiesbaden	0611 / 5829602	info@3d-io.com
5d lab	Güterhallenstraße 4	79106	Freiburg	0761 / 28533385	info@5dlab.com
Adrastea	Bielefelder Str. 5	90425	Nürnberg	0700 / 42300000	info@adrastea.com
Aesir Interactive	Grafingerstraße 6	81671	München		w.emmer@aesir-interactive.com
Animation Arts Creative	Ankerstraße 3a	06108	Halle (Saale)	0345 / 4700274	info@animationarts.de
AntMe!	Mülleranger 7a	82284	Grafrath		info@antme.net
Bad Monkee	Grindelallee 100	20146	Hamburg		info@badmonkee.de
B-Alive	Panoramastraße 23	88444	Ummendorf	07351 / 441307	admin@b-alive.de
Beardshaker Games	Wartenau 16	22089	Hamburg	040 / 28471900	contact@beardshaker.com
BIGITEC	Theaterstraße 22	53111	Bonn	0228 / 42976585	info@bigitec.com
BIGPOINT	Drehbahn 47-48	20354	Hamburg	040 / 8814130	info@bigpoint.net
b-interaktive	Lohbachstraße 12	58239	Schwerte	02304 / 3382391	info@binteraktive.com
Bit Barons c/o Wailua Games	Schellingstraße 35	80799	München	089 / 41617744	info@bitbarons.com
Black Forest Games	Maria-und-Georg-Dietrich-Str. 2	77652	Offenburg	0781 / 31057910	info@bfgames.biz
Black Pants Studio GmbH	Thiemannstr. 1, Tor 4 Haus 5	12059	Berlin	0160 / 6529506	mail@blackpants.de
Blazing Badger	Niddastraße 64	60329	Frankfurt am Main		info@blazingbadger.com
Blue Byte	Adlerstraße 74	40211	Düsseldorf	0211 / 338000	info@bluebyte.de
Blue Byte Mainz	Römerpassage 1	55116	Mainz	06131 / 554470	studio-mainz@bluebyte.de
Bongfish	Am Eisernen Tor 3/2	A-8010	Graz	+43 / 676 / 7822203	info@bongfish.com
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Square Enix		Domstraße 17	20095	Hamburg	040 / 30633400	
Take-Two Interactive		Ganghoferstraße 70	80339	München	089 / 278220	info@take2.de
THQ Nordic		Landstraßer Hauptstraße 1/Top 23	A-1030	Wien	+43 / 720 / 518790	
Tivola Publishing	key player	Oeverseestraße 10-12	22769	Hamburg	040 / 7070063	mail@tivola.de
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Travian Games		Wilhelm-Wagenfeld-Straße 22	80807	München	089 / 3249150	mail@traviangames.com
Ubisoft	key player	Adlerstraße 74	40211	Düsseldorf	0211 / 338000	info@ubisoft.de
United Soft Media Verlag		Thomas-Wimmer-Ring 11	80539	München	089 / 29088175	info@usm.de
upjers		Hafenstraße 13	96052	Bamberg	0951 / 510908100	mail@upjers.com
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PUBLIC SECTOR						
BIU	key player	Charlottenstraße 62	10179	Berlin	030 / 24087790	info@biu-online.de
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FilmFernsehFonds Bayern	key player	Sonnenstraße 21	80331	München	089 / 5446020	filmfoerderung@fff-bayern.de
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games.net berlinbrandenburg	key player	Ackerstraße 3A	10115	Berlin	030 / 24628570	games.net@medianet-bb.de
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nordmedia	key player	Expo Plaza 1	30539	Hannover	0511 / 1234560	info@nordmedia.de
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SAE Institute Hamburg	key player	Feldstraße 66	20359	Hamburg	040 / 23688080	hamburg@sae.edu
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Making Games	key player	Dr.-Mack-Str. 83	90762	Fürth	0911 / 2872100	info@makinggames.de
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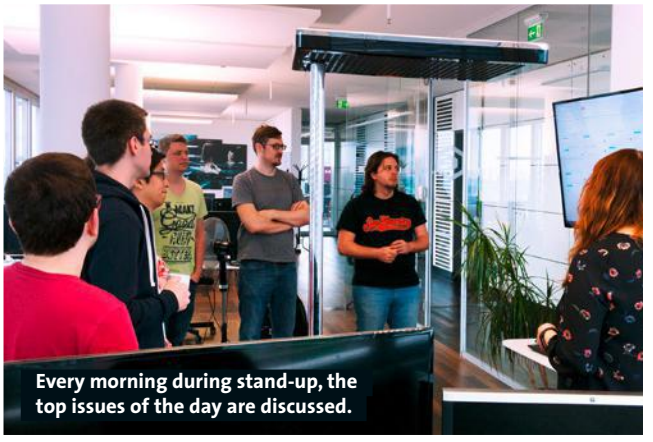
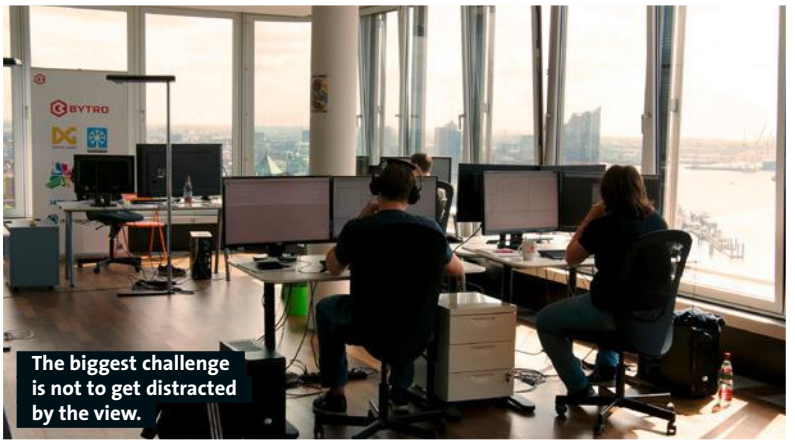
A day at ... BYTRO LABS

Football is a big thing here at Bytro. Nice gesture: Even the colleague wearing the Werder jersey was allowed in the picture.

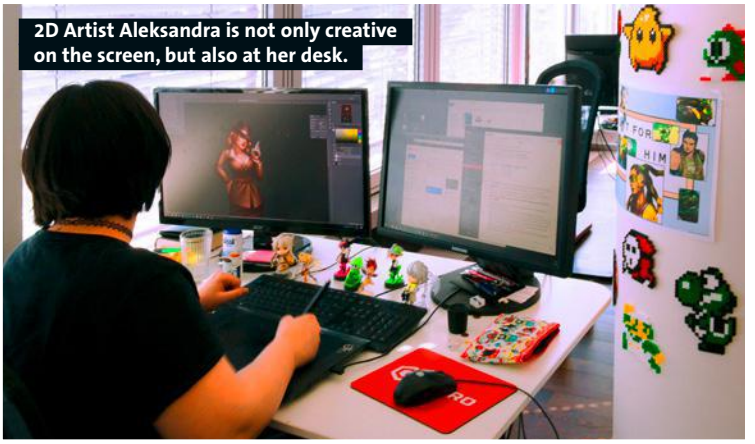
Of course, there is the obligatory game-based office decoration.



Every morning during stand-up, the top issues of the day are discussed.

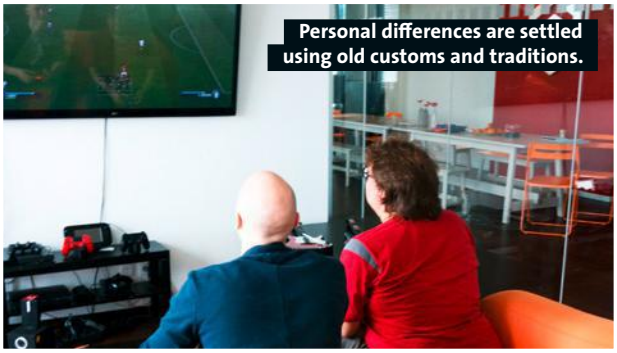


The biggest challenge is not to get distracted by the view.

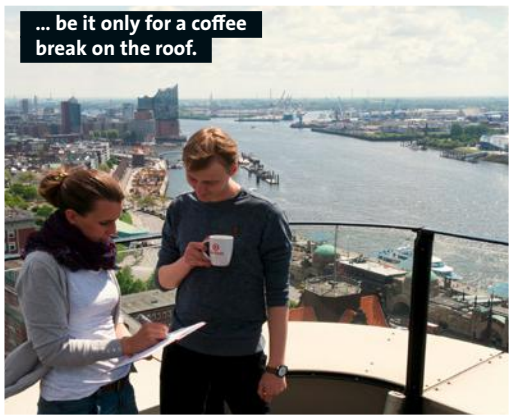


2D Artist Aleksandra is not only creative on the screen, but also at her desk.

For our appointment with Bytro Labs, we had to climb high – a visit on the 15th floor of Hamburg's Astra tower. In a series of conclusive pictures, the team tells us how a day in the life of the browser experts looks like.


Personal differences are settled using old customs and traditions.

The team enjoys (what feels like) 15 hours of sun per year in Hamburg...

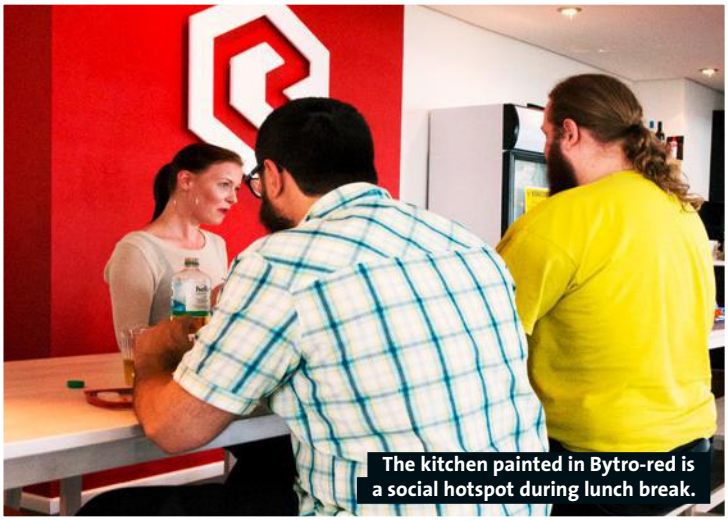

... be it only for a coffee break on the roof.

When discussing classified topics in meetings, General Montgomery is obliged to keep watch.

Love at first sight: Hamburg and Bytro.

With an arsenal of plastic toys, the team is prepared for all sorts of emergencies.

He may look soft on the outside, but inside DevOps Engineer Uli is made of steel!


The kitchen painted in Bytro-red is a social hotspot during lunch break.

The next issue

Making Games 07-08/17

MAKING GAMES PREVIEW

09-10|17

MAKINGGAMES | TO BE PUBLISHED ON AUGUST 18, 2017

In the spirit of gamescom, the upcoming issue of Making Games will get into the thick of things – in the form of two extra-large specials!

Six years of war in World of Tanks

For more than six years, Wargaming has been producing worldwide virtual fender benders with their 3rd-person shooter »World of Tanks«. In association with their traditional annual special, the developers use the opportunity to tell us more about the evolution of their online F2P hit.

Piranha Bytes' Making of ELEX

The day will finally arrive on October 17. That's when Piranha Bytes' latest RPG epic »ELEX« will be released, which takes us to a post-apocalyptic world full of adventures and dangers. Until then we will take you on a tour behind the scenes of the hotly anticipated RPG novice by the makers of »Gothic« and »Risen«.

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